THE CRAZE FOR THE NUDE REACHES BEETLEBUROH

Belle Mead Sweets

Bon Bons & Chocolates

for Christmas

The daintiest of delicious candies temptingly good and always pure and wholesome, packed in boxes that are as inviting as the sweets themselves

At all good drug stores

Belle Mead Sweets *Trenton - New Jersey*

Where Santa Claus Buys His Dolls

By MRS. C. R. MILLER

THE BAVARIAN.

SWISS WOMAN.

CHARCOALER.

AN OLD FIGURE.

A CURIOSITY.

A FINE FIGURE.

A BEAUTY.

A YOUNG VICTOR.

AWAY up in the forests of Thuringia and Bavaria men, women and children are working day after day fashioning dolls—dolls of every description, which will be shipped to this country to delight our little American girls on Christmas morning. Santa Claus needs to go orders early, for he will brook no disappointment for his little friends on this side of the Atlantic. Many of these dolls are the products of the cottage industry, for hundreds of them are made in the homes of the peasants. They are not as fine and beautiful, perhaps, as those which are turned out in the large factories; but they are nevertheless unique in many ways, and their very quaintness is attractive to the curious little American who, like the grown-ups of the present day, is ever longing for something new—something different.

The United States to-day is Germany's best customer for toys of every description, especially dolls, and each year new types are put on the market. In Sonneberg the greater part of the population is engaged in this industry, and it is the chief source of revenue for which they are made. The arms, legs and hands are molded in the same manner as the heads—a special wooden being used for stamping out the hands. These parts are painted in their color, while the heads must have rosy cheeks, red lips and dark or light eyebrows, as the color of the eyes must map require. Putting in the eyes is a simple operation, unless the eyes are to open and shut, in which case the fastening of the lid becomes a matter of some skill. The many processes a secret formula for the enamel used on the faces and the dainty, natural flesh tint of the better grade of dolls is the result of this process. The coloring of the eyes is a dreary task, for it must be done away from the sunlight, and in some parts of Germany the eye makers work in the cellars. It is said that one town supplies three-fourths of all the dolls' eyes used. Water is the most difficult color to mix, and few understand how it is done.

The wig is the final touch, and this is usually made of real hair imported from China. The hair used for cloth dolls is the same, except that the color is not treated. The assembling of the parts is often very

A DUTCH DOLL.

CAPT. KIDD.

THE OWL.

THE BUDDIE.

THE DOG.

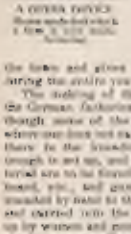
DR. COOK.

THE NURSE.

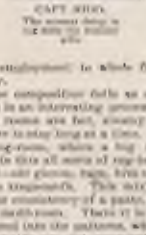
the latter and gives employment to whole families during the entire year.

The making of the composition dolls as seen in the German factories is an interesting process. Even though some of the items are fast, exacting pieces where one does not care to stay long at a time. First, there is the kneading-room, where a big mixing trough is set up, and in this all sorts of rag-bag material are to be found—old gloves, rags, bits of cardboard, wire, and goo knows what. This mixture is moulded by hand to the consistency of a paste, baked and carried into the mold-room. There it is dipped up by women and pressed into the patterns, which are set up to cook. The molds are put away until they are cold enough to handle, when a workman, by a dexterous movement of his hands, separates the molds alike, and the doll's head is revealed. The painter then trims off the ragged seams and sends the heads to another room, where the holes for the eyes are cut out. This is an extremely delicate task, as all the molds must be of uniform size. The work is done by hand, a long, sharp knife being used.

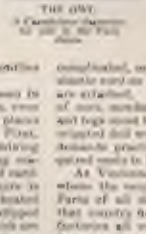
The heads are next painted, waxed or glazed, according upon the character of the material from



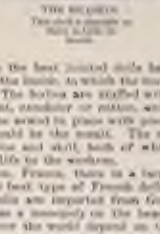
A QUEER DEVICE.



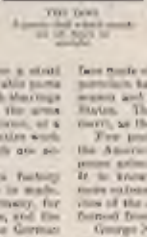
CAPT. KIDD.



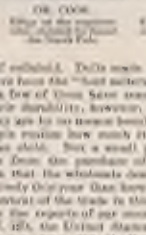
THE OWL.



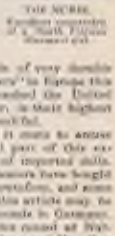
THE BUDDIE.



THE DOG.



DR. COOK.



THE NURSE.

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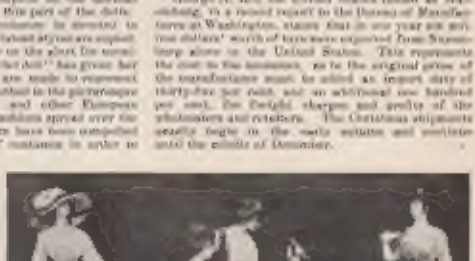
The heads are next painted, waxed or glazed, according upon the character of the material from which they are to be made. The better grade of dolls are considered, as the best jointed dolls have a steel elastic cord on the inside, to which the movable parts are attached. The bodies are stuffed with shavings of wool, sawdust, excelsior or cotton, and the arms and legs must be sewed in, place with precision, or a crippled doll would be the result. The entire work demands practice and skill, both of which are appreciated only in life by the workmen.

At Vercinnes, France, there is a large factory where the very best type of French dolls is made. Parts of all dolls are imported from Germany, for that country has a monopoly on the heads, and the factories all over the world depend on the German factories for their supply of this part of the doll.

A special branch of the industry is devoted to making dresses and hats. The latest styles are copied. The women in charge is sent to the store for new clothes, and this year the "character doll" has given her or little study. These dolls are made to represent different nations. They are clothed in the picturesque costumes worn in Germany and other European countries before the French fashions spread over the world, and the doll dressmakers have been compelled to study various costumes in order to

IN THE HOUSE OF FASHION.

Some of the latest French dolls which have been displayed this season.



A GRACIOUS BOY.

Some of the dolls of France which Santa Claus will carry in his pack.

have made of enamel. Dolls of this type have an educational value and will likely prove popular.

In Paris there is a large doll showmaking establishment where hundreds of girls (many of them fashion experts) are employed. Prizes are offered each year for the most artistic creations in doll dressing and manufacture. This accounts for the fine finish of the French doll, which is a genuine counterpart of the stylish French woman of the period.

Germany, too, has made rapid strides in the production of the doll, and as far back as 1881 there was a school for the purpose of teaching the art of coloring the faces, and the beautiful, artistic baby dolls, with faces painted from living models, are the work of some of its pupils.

Each Christmas season brings its crop of freak dolls, and this year one made of what is commonly known as the "talking glass" has made its appearance. I saw a number of these in the toy stores in Nuremberg, and their ability seemed to appeal to the German child. The glass toy is light in weight, will stand hard wear, and has rather an attractive

Collier's

THE NATIONAL WEEKLY

VOL XLIX NO 15

JUNE 29 1912

Painted by H. Mause for Cream of Wheat Co.

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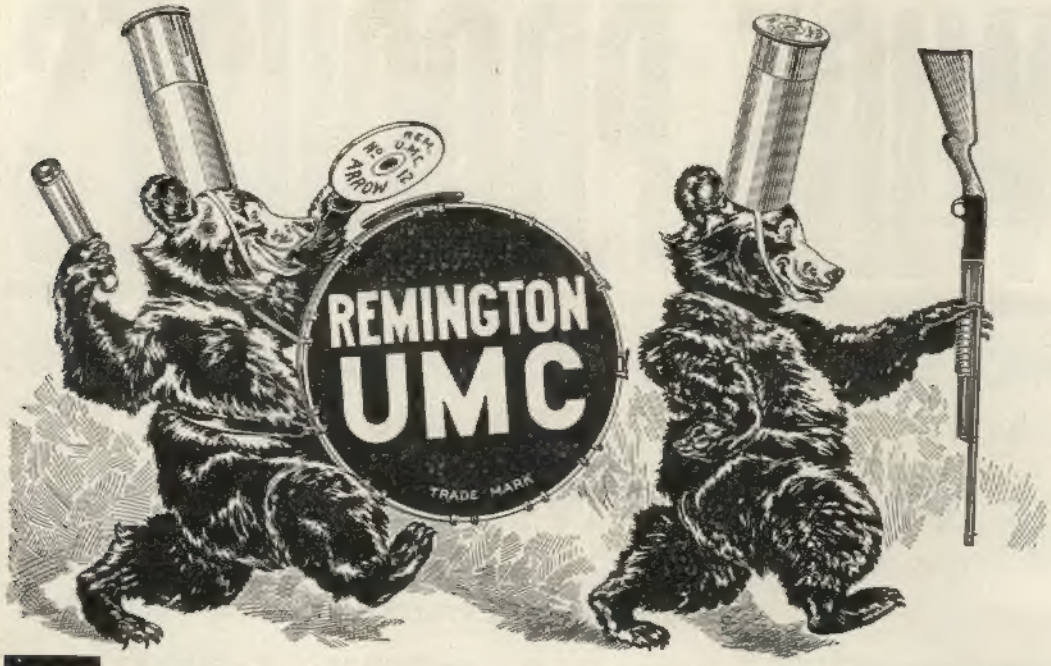
IN THE GLOAMING.

Remington-UMC Beats the World in Olympic Games



American Experts and Remington-UMC Arms and Ammunition Set a New Pace in the Great Stockholm Meet

Individual Clay Bird Championship. won by J. R. Graham, shooting a Remington-UMC Pump Gun and Remington-UMC Arrow Steel Lined Shells, score 96 ex 100.

Team Clay Bird Championship. The five high men in the victorious American Team shot Remington-UMC Arrow Steel Lined Shells, the team scoring 532 ex 600.

Revolver and Pistol Competitions. A. P. Lane, shooting Remington-UMC Metallic Cartridges made the best individual score and a world's record in the team competition at 50 metres, scoring 509 ex 600; won first in the team competition at 30 metres, scoring 292 ex 300, and won the individual competition at 30 metres, scoring 287 ex 300. Paul Palen, also shooting Remington-UMC Metallic Cartridges, was second in the 30-metre team competion.

Running Deer Championship. Pitted against a formidable field in which the nations of the world were represented, the American Team, shooting Remington-UMC rifles and ammunition, closely contested for first honors, losing by only 8 points. Sweden was first, scoring 150, America second, scoring 142, and Finland third, scoring 123.

The Olympic winnings have welded another link in the chain that binds the shooting fraternity to "Remington-UMC—the perfect shooting combination." No dealer should neglect this profit-making opportunity to interest old and new customers in the Red Ball Brand.

Remington Arms-Union Metallic Cartridge Co.

299-301 BROADWAY NEW YORK CITY

The Stove Report

New Indiana Stove Company

The Shepherd & Schelhorn Company, Evansville, Ind., have incorporated with a capital of $1,000, to manufacture stoves, the directors being: J. T. Shepherd, C. S. Schelhorn and Carrie Schelhorn.

New Stove Design

Charles M. Genthner, Middletown, Pa., has been granted patent No. 42,795 on a new design for a cooking stove, which he has assigned to the Wincroft Stove Works, Middletown, Pa.

Stove Company Incorporated

Articles of incorporation of the Graff Stove & Range Company, Louisville, Ky., have been filed. The authorized capital is $100,000, with the following incorporators: Henry J. Graf, Louisville; Theodore H. Graf, New Albany; William Hale, Louisville.

Purchased Ground from Stove Works

The ground formerly occupied by the Thomas, Roberts, Stevenson Stove Works has been purchased by the city of Philadelphia for the erection of one of the largest elementary school houses in the United States, together with a large playground.

Southern Stove Manufacturers Meet

The Southern Stove Manufacturers' Association held its quarterly meeting in Rome, Ga., July 17. The meeting was presided over by President Heading, of Chattanooga, with J. P. Bowie, of Rome, Ga., secretary and treasurer, also present. Most of the principal stove foundries in the south were represented. The question of freight rates, methods of manufacturing and other topics were discussed.

Stove Pipe Retainer

Patent No. 1,032,859 has been granted William Henry Pleasants, Cripple Creek, Colo., on a stove pipe retainer, comprising a brace member removably attached to a stove pipe section; an elongated hook member slidably mounted on the brace member; a clamping screw mounted on the brace member to holdingly engage the hook member; and a supporting member for the stove pipe engaging the screw to prevent the same from turning.

Riverside Stoves

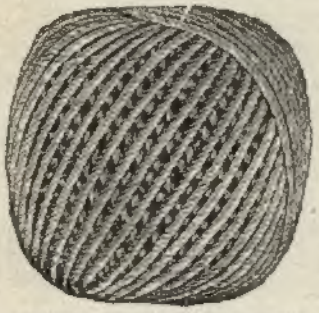
The Rock Island Stove Company, Rock Island, Ill., have issued a new and attractive catalogue illustrating and describing in a very thorough manner their well known line of Riverside stoves and ranges. The book also shows various interior views of their factory as well as pictures of their goods in actual use. In the opening chapters the company tell of what their direct advertising service means to the retailer, how to protect against price cutting, and give other information of value. A large line of ranges is shown, with full and complete descriptions. The line of base burners is also large, including six distinct styles of the well known new Riverside Aer-Duct. There are illustrated, oaks, wood stoves, and a complete repair list is presented. The book is of 130 pages and a publication that stove dealers will appreciate.

Patented a Cooking Stove

Earl V. Coulston, Cleveland, Ohio, has been granted patent No. 1,032,816 on a cooking stove comprising a fire box, an oven, flues surrounding the oven, a front wall, with doors, inclosing the fire box, oven and flues on one side, a removable plate in bottom of the oven just inside one of the doors of the front wall, a chamber below the plate formed on one side by the front wall, the front wall having openings in communication with the chamber to admit air for the support of combustion, a burner disposed in the chamber, a deflector spaced above the oven bottom forming a circulating space which communicates with the chamber and with oven space above substantially opposite, the oven having a closable vent substantially opposite the latter point of communication, and means connecting said vent with the flues.

Toledo Stoves and Ranges

The Toledo Stove & Range Company, Toledo, Ohio, have issued a new catalogue of 104 pages, well printed and illustrated and altogether artistic and attractive in appearance. A half-tone picture of the large factory and office appears on the first page and at once gives an idea of the importance of the concern. In an introductory the company say: "We are going to make this our banner year. You will find by looking over our catalogue, we have some very attractive designs in stoves and ranges. When it is known that every heating and every cooking appliance listed, represents but one standard of quality—then the highest and best merchants who have built up their business and their reputation by selling first-class goods which give satisfaction, will be interested. In addition to our using the best material and employing the best skilled labor, we have the best designers and expert pattern-makers employed by any stove foundry and our prices are always right." Instructions for using coal ranges and directions for baking are given, after which the line manufactured is illustrated and described. The showing includes cast ranges, in various designs; steel ranges, including the Plain Toledo and New Toledo; cast cooks, with reservoir and without; the Toledo base burner, with full directions for operating; hot blast oaks, in many styles; gas ranges, in a variety of designs; gas heaters, etc. The descriptions accompanying the illustrations are very complete and the entire book is one reflecting credit on the company, a publication that is a valuable addition to stove literature.



CHALK AND MASONS' LINES,
BRIGHT WIRE GOODS AND
PICTURE HOOKS,
SPOOL WIRE and GILT NAILS
Established 1877
The Turner & Stanton Company
NORWICH, CONN.

Duplicating Sales Books
For Hardware Stores

Our plant is equipped with automatic presses and special machinery that turn out the books at great speed—numbered, printed, perforated, folded and counted. Send for catalog, price list and samples.

ADAMS BROTHERS CO.
TOPEKA, KAN.

THE CRYSTAL
A SANITARY COFFEE MILL

It is an absolute waste of money to pay a big price for a fine blend of coffee and then leave the very qualities you are paying for in the grocer's coffee mill.

Perhaps a dozen kinds of coffee have been ground in the mill before yours goes thru and picks up the "leavings." Compare these conditions with the scientific way.

The coffee is kept in the air-tight, glass hopper of the Crystal, free from dust and atmospheric action.

A few turns of the crank and the freshly ground coffee with all its delicious flavor is put in the pot—not an atom of its Strength is wasted.

It will give any result required, from the coarsest grain to the finest powder. When it is set to grind a size it will always give precisely the same result.

Send for prices, and also ask for our complete catalog.

ARCADE MFG. COMPANY
FREEPORT, ILLINOIS

A Portion of a Theatre Ceiling

Interior Effects Like This Get Business For You

The illustration shows clearly what is possible in the way of design when handling "Classik"

The richness and depth of embossing are made possible by the special analysis Open Hearth Steel used by us—it's one of the many points that make them the world's standard.

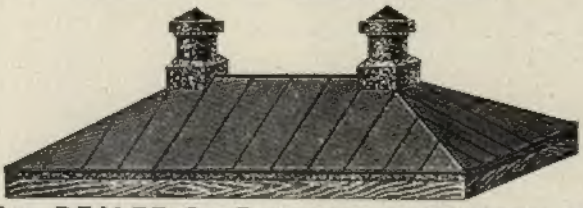
Secure the agency—there's money in it. Write nearest branch.

Boston, New York, Philadelphia, Atlanta — **THE BERGER MFG. CO.** — Minneapolis, St. Louis, Chicago, San Francisco

Canton, Ohio

We also manufacture Black and Galvanized Roofing, Eaves Trough and Conductor Pipes, Sidewalk Forms, Metal Lath, Tin Plate, etc.

THERE IS A GOOD PROFIT



TO THE DEALER ON BUILDING SHEET METAL WORK
PLACE YOUR ORDER WHERE THE PRICE IS RIGHT
CATALOGUES SENT ON REQUEST
E. E. SOUTHER IRON CO. ST. LOUIS, MO.

Jobber's Future Sales Records

The Jobber's Future Sales Record is arranged to show you at a glance, opposite the name of every customer, the quantity of all future goods he buys of you over a three-year period. Spaced for one hundred and sixty future items in the most convenient form possible. At the back of this Record you have summary sheets which give you the totals by months for three years of all futures sold. Two books in one binder for your convenience.

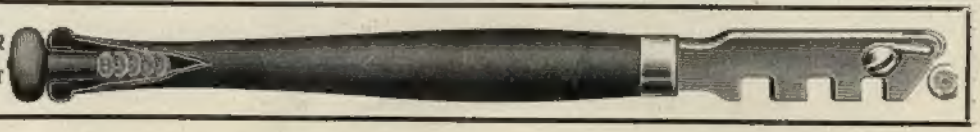
The Jobber's Future Sales Record with Summary Sheets is put into a loose-leaf binder of the latest pattern. Bound in Russia leather and corduroy. Title and jobber's name in gold letters. Binder holds 1,000 to 2,500 names.

PRICE COMPLETE FOR 1,000 NAMES OF CUSTOMERS WITH SUMMARY SHEETS $15.00, EXPRESS PREPAID.

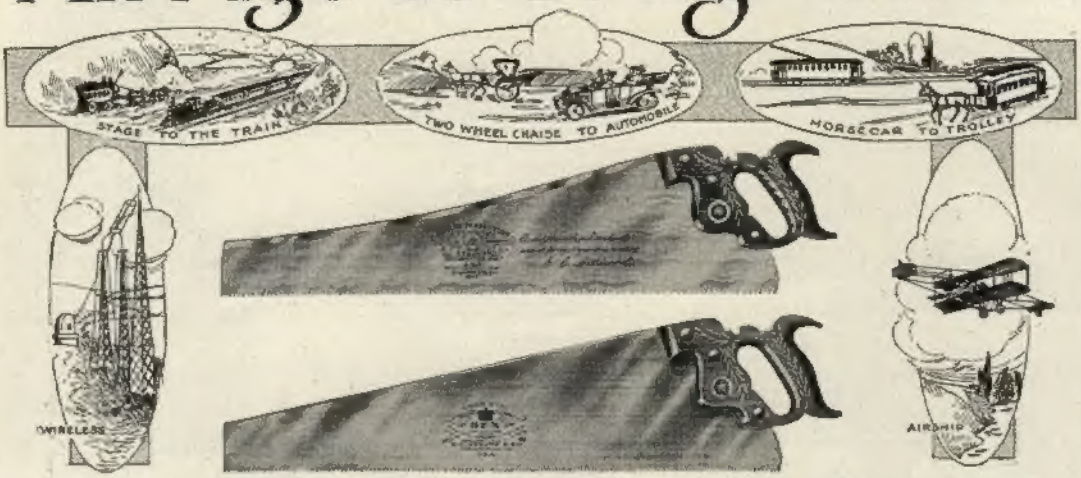
EXTRA SHEETS FOR EACH ONE HUNDRED ADDITIONAL NAMES, $1.00.

THE HARDWARE REPORTER
509 OLIVE ST. —:— ST. LOUIS, MO.

MAGAZINE
GLASS CUTTER
5 EXTRA WHEELS
W. L. BARRETT
BRISTOL, CONN.



An Age of Progression



Atkins Silver Steel Saws

This is an "Age of Progression". The mechanic of today very rightly demands the finest tools. He wants the latest improvements and is entitled to them.

ATKINS SILVER STEEL SAWS

These Famous Saws are the embodiment of American Progression in the Saw line.

Just as the railroad train has superceded the stage coach—the automobile the two wheeled chaise—the trolley the horse car, so have ATKINS SILVER STEEL SAWS passed all others in scientific construction and result giving qualities.

Through their use, the mechanic of today is enabled to easily achieve what was impossible with the old style Saw. ATKINS SILVER STEEL SAWS represent to the mechanic the same advancement as the wireless telegraph and air ships offer to the world at large.

A progressive merchant who desires to sell his customers the very *best* of everything, *must* include ATKINS SILVER STEEL SAWS.

Be progressive. See that your customers secure the most improved merchandise. Sell them ATKINS SILVER STEEL SAWS. Secure the benefits of Atkins Advertising Assistance and make the most money.

Atkins Always Ahead!

Order through your Jobber. If he will not supply you, then write to the nearest address below.

E. C. ATKINS & CO., Inc.

The Silver Steel Saw People

Home Office and Factory, INDIANAPOLIS, IND. Canadian Factory, HAMILTON, ONT.
Machine Knife Factory, LANCASTER, N. Y.

Branches: Atlanta, Chicago, Memphis, Minneapolis, New Orleans, New York City, Portland, San Francisco, Seattle, Vancouver, B. C., Sydney, N. S. W.

THE
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QUALITY
JAMESTOWN AXE CO.
CAST STEEL AXES
HUNT'S
SUPERIOR AXES
MANUFACTURED FROM
BEST REFINED CAST STEEL
BY THE
DOUGLAS AXE MF'G CO.
ROBERT MANN
SUPERIOR
CAST STEEL AXES
EXTRA STEELED
MILL HALL, PA.
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BLOOD'S
CHAMPION
THE RED WARRIOR
LIPPINCOTT & CO. AXE MF'G BY
HUBBARD & CO. PITTSBURGH, PA.
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MANUFACTURERS OF
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Cinch Intermittent Alarm

"The Clock With The Bell Inside" and Stem Shut Off

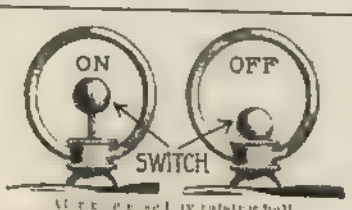
Restricted Price to Retail Trade

Case Lots (50 clocks) . . Each 74c
Small Lots . . . . . Each 76c

Subject to [illegible] 10 days

These prices apply only to the territory east of the Rocky Mountains

Name of dealer printed on the dial (case lots) without additional charge



Alarm set by rotating ball
Alarm stops by pressing ball down

A "Cinch" for time
A "Cinch" for price
A "Cinch" for resale
A "Cinch" for profit

Ingraham Clocks sold only through Jobbers

Diameter of Case 4½ inches.

Cut is Half Size

Seamless Brass Case nickeled and highly polished

Alarm Rings Alternately every 15 Seconds for 10 minutes.

If your Jobber does not stock "CINCH" Clocks, write us.

THE E. INGRAHAM COMPANY :: **Bristol, Conn.**

HIGH QUALITY MAKES CYCLONE Fences & Gates of WAUKEGAN ILLINOIS The Surest Sellers

When you handle Cyclone fences and gates you handle the goods that always have been and are today **the recognized standard in wire fencing.** The Cyclone Factory is the **biggest establishment of its kind in the world.** It has grown to be such because its product has been always of uniform high quality.

You can tell the Waukegan, Ill., Cyclone Fences and Gates from all others by their special features: The close short lock at the intersection of picket wires, the uniform spacing of pickets, the close twist of the cabled line wires, the sharp corrugation at the bottom of picket wires. All these features make for strength and durability and are to be found in no other wire fencing

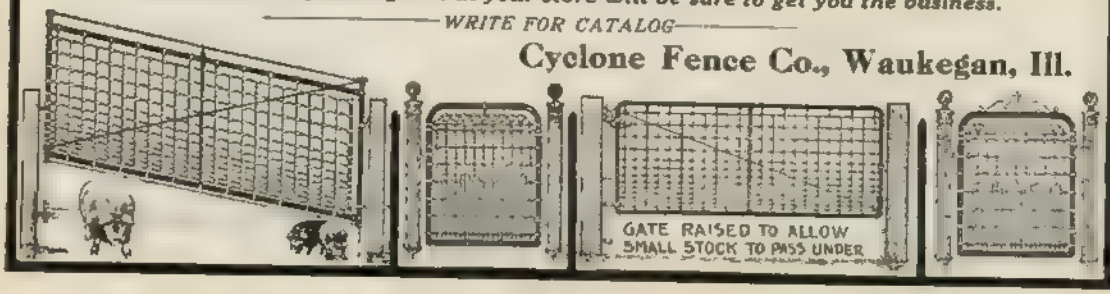
All Cyclone fences and gates are made of highest quality galvanized steel wire and steel tubing. They are easily put up, are cheaper than wood, and will last a lifetime.

They are made in many ornamental designs and with all accessories for the protection and ornamentation of the premises.

A full line of Cyclone goods in your store will be sure to get you the business.

WRITE FOR CATALOG

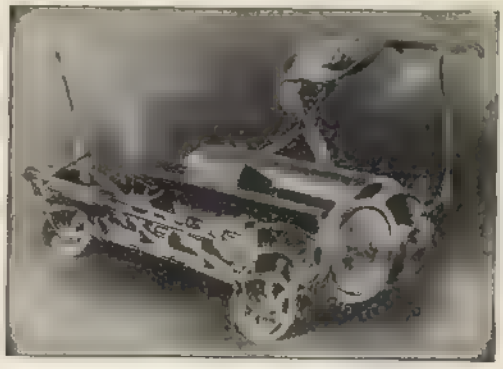
Cyclone Fence Co., Waukegan, Ill.



COLDWELL'S HORSE MOWER

MR. DEALER:

How about that order you were going to get for a COLDWELL HORSE MOWER? Now is the time to follow up that prospect you had in mind. Perhaps we can help you to get it.



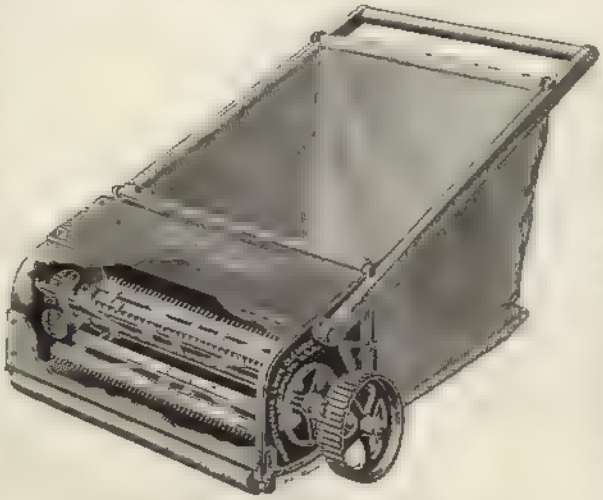
The Coldwell is the only Horse Mower used on the New York Parks. They are also used by the United States Government.

SEND FOR CATALOGUE

COLDWELL LAWN MOWER CO.

CHICAGO NEWBURGH, N. Y.

Pennsylvania Lawn Cleaner and Rake



24 inches wide, list price $20.00
36 inches wide, list price $30.00

THIS machine will remove from the Lawn not only the cut grass, but all sorts of litter, leaves and trash, leaving the grass standing upright and free from foreign matter that prevents the sunlight and dew from getting to the roots. The action of the three revolving wire tooth rakes is beneficial to the turf, for it raises up the low growing crab grass and other spreading weeds, allowing the lawn mower to cut the seed pods off before they ripen, thus preventing their reappearing the following year. As these weeds and grasses are annuals it is only necessary to prevent their going to seed for a season to get rid of them and this is most effectively accomplished by the use of the **PENNSYLVANIA LAWN CLEANER AND RAKE.** This machine is easy to operate, and with it *one man will do more and better work than four men with hand rakes.*

A strong current of air, created by a rapidly revolving fan with metal teeth, is the principle by which this machine cleans lawns.

The metal teeth rake up everything on the surface of the lawn and in combination with the current of air, carry it to the canvas receptacle or basket, which is large and easily emptied when full.

Supplee Hardware Company

Philadelphia - Pennsylvania

Milbradt Rolling Step Ladders

Have been long and favorably known for their satisfactory service. They are shipped on approval and guaranteed in every respect.

The ladder here shown is especially adapted for use in hardware stores or where heavy goods are to be handled.

Write for Catalogue which shows a great many other styles, suitable for all kinds of shelving and stores.

Milbradt Manufacturing Company

1440 N. Eighth St., St. Louis, Mo.

HARDWARE SHELF BOXES

FOR THE RETAIL TRADE

Send for Price List

THE A. H. GREEN CO.

99 Warren St. NEW YORK

Do You Get the Railing Business in Your Town?

You should —It means PROFIT to you. Are you in a position to give your customer what he wants—what he should have.

We [illegible] high grade [illegible] Railings to [illegible] purchaser [illegible] Kling Starch and for the asking [illegible] styles and designs.

Let us send you our complete Wire Goods Catalogue. It will [illegible] you. Write us now.

BUFFALO WIRE WORKS CO., BUFFALO, N. Y.

[illegible] Manufacturers Steel Wire Cloth and Wire Goods

Mr. Hardware Dealer---

May we place this splendid equipment in your store and show you how to

Sell More Goods

at better prices and save time and labor?

WARREN

Fixtures earn and save all they cost and keep on doing so.

Catalog "B" on request free.

J. D. WARREN MFG. CO.

CHICAGO

COLT

AUTOMATIC *Caliber* .25 PISTOL

The AUTOMATIC GRIP SAFETY *positively locks the action against firing until automatically compressed by the shooter when he intends to pull the trigger.*
The SLIDE LOCK SAFETY can be thrown on if desired, making the COLT doubly safe.

"YOU CAN'T FORGET TO MAKE IT SAFE."

DEALERS: This model now being advertised in leading publications to create demand on you

COLT'S PATENT FIRE ARMS MFG. CO.
HARTFORD, CONN.

BEST VALUE IN

STEVENS RIFLES — THE BULL'S-EYE KIND

Double Guns at Popular Prices

STEVENS

Hammer and Hammerless

GUARANTEED FOR QUALITY AND FOR QUICK SALES

Prompt Deliveries From Your Jobber

J. Stevens Arms & Tool Co.

STEVENS SHOTGUNS

P. O. Box 47
Chicopee Falls
Mass.

AMATEUR CHAMPIONSHIP GAME TOURNAMENT 1911

WESCO

A BATTERY WITH A RECORD

A carload a week.
Half million a year.
Fresh stock all the time.

The Red Shield Battery is dependable and is widely used for automobiles, launches, stationary engines, etc.

Get our 1912 contract prices.

WESCO SUPPLY COMPANY.
"Send us your next order"
FORT WORTH ST. LOUIS. BIRMINGHAM

AUTO AND ELECTRIC SUPPLIES

"BRIDGEPORT"

BICYCLE PUMPS

Mean satisfied customers and good dealers' profits.

We manufacture both Foot and Hand Pumps, with seamless brass tube cylinders, also

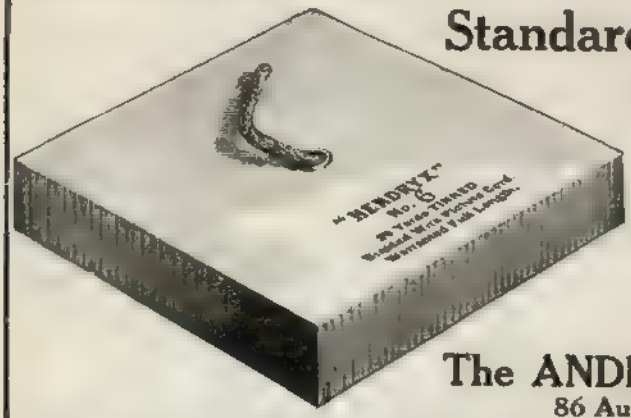
"Search Light" Lanterns

Both Gas or Oil

Are you selling Automobile Tire Pumps? If not, write for our Pump Booklet at once. Ask your Jobber.

BRIDGEPORT BRASS CO.
156 CRESCENT AVENUE, BRIDGEPORT, CONN.

Standard Wire Picture Cord



"HENDRYX"

Has always been the only absolute guarantee of full length, size and count of wire. Other manufacturers vary their discounts in proportion to the short length of the wire.

Open a box of picture cord in your stock and measure it. You can't afford to sell short length wire.

WRITE FOR CATALOGUE No. 7

The ANDREW B. HENDRYX CO.

86 Audubon St., New Haven, Conn.

You Can Sell Right When You Buy Right

STOVER'S IDEAL

Ice Picks, Ice Shavers, Lemon Squeezers and Steak Pounders

are the kind your customers inquire for

They are well made, well finished but sold low enough so you can put them in your sale counters and make a

GOOD PROFIT

A trial order will show you that they are the best

STOVER MFG. CO.

729 East St. - FREEPORT, ILL.

Square Fountain Sprinkler

SPRINKLES EVENLY A SQUARE

A MOST BEAUTIFUL SPRAY

Extra Heavy Brass—Built to Stand the Knocks.

Furnished with either brass or galvanized steel tubing, the latter

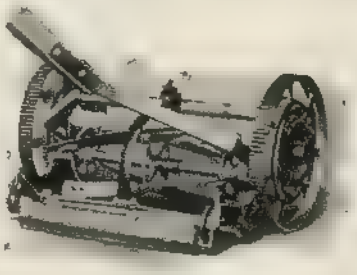
A HOT 50c SELLER

Highly polished and lacquered. Packed in individual box, two dozen in large two-color display carton

A sample postpaid for 35c to any dealer

Central Brass & Stamping Co., Peoria, Ill.

Originators—Not Cheap Imitators



TIGHTENING ITS GRIP

That's the sort of stuff a dealer likes to sell—something that's *on the rise* in public esteem. It cuts out a lot of friction in the sales department. The

Eclipse

Self Sharpening

Lawn Mower

is tightening its grip on popular favor this season. Users like the Eclipse for its perfect adjustment to the service for which it is built. It is strong, rigid, always sharp and easily operated. A fine machine to look at, a fine machine to *push*.

Hundreds of new dealers are going to push it next season. Write

THE ECLIPSE LAWN MOWER CO.

PROPHETSTOWN, ILL.

years of study and experience

have made us experts in the manufacture of

POWER TRANSMISSION MACHINERY

FOR more than a half century the JONES & LAUGHLIN STEEL COMPANY has been making especially fine steels for transmitting power. Our belt mechanics own to be the leading manufacturers of high grade steel belting. Our corps of engineers and workmen are specialists in the art of Transmission.

We have the engineers, equipment and foundries to build complete power plants, and our experts are always at your service. Our Pittsburgh office is the best source of information as to the latest methods and machinery for any sort of drive. We have a complete stock of power transmission machinery at Pittsburgh and can ship promptly. Write us.

The steel which goes into our product we make ourselves in our own mills, where every process of rolling is carefully watched by skilled experts. Our reputation for quality is at stake in every piece of steel we make.

Send for our new illustrated catalog "M"

Jones & Laughlin Steel Co.

American Iron & Steel Works

PITTSBURGH

Adjusted to the Work Instantly

The "FITZALL" Wrench is a new idea in wrenches, the simplest wrench made. It has no thumb screw, spring or fussy parts. It is instantly adjusted to the work by pushing up the sliding wedge. Then the harder the pull the stronger the FITZALL grips the work. It is instantly released by giving the handle a slight jar. It is

Simple, Durable, Powerful

Made in all sizes—both nut and pipe. We also make thin model FITZALL Wrenches for automobile work.

The Attractive FITZALL Package

Look For the Diamond Trade Mark

The "FITZALL" Pipe Wrench

has a renewable tooth block—the only wearing part —which can be furnished by dealers at a small cost.

To Obtain Great Leverage

a special Extension Handle can be furnished by us or a piece of iron pipe may be used over the handle of the wrench

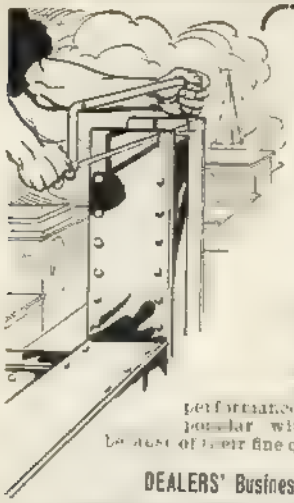
A Wrench with Good Profits for the Dealer

TRADE FITZALL MARK

Write for Fitzall Catalog and Prices

Standard Wrench and Tool Co.

PROVIDENCE, R. I.



Above them all—

STAR HACK SAW BLADES

are above all others in quality, durability and performance. They are exceedingly popular with dealers and users because of their fine quality and adaptability

DEALERS' Business Thrives on the Star

The dealer who stocks Star Hack Saw Blades will be able to meet all demands without the necessity of carrying a stock of blades of varying widths and number of teeth to the inch.

Star Blades with 14 teeth to the inch are suitable for every class of work except tubing less than ⅛ in. For such work use Star Blade with 24 teeth to the inch.

The reasons which make Star Blades good to sell also make them good to use. Write for our interesting proposition.

Our Free Book, Tool Practice' is worth while sending for

MILLERS FALLS COMPANY

28 Warren Street New York

Standard for Twenty-five Years

We Commenced Jan. 1st

To Market Our Own Goods,

the Swan Line of fine Mechanics' Tools—Auger Bits, Chisels, German Bits, Gouges, Draw Knives and Screw Drivers.

These goods have been sold through the Russell & Erwin Mfg. Co., of New York, for many years, and are known to all good workmen.

We shall be pleased to receive inquiries in regard to the line and wish to state that we have established a New York office at 100 Lafayette Street, where a complete line is carried.

TRADE MARK

Look for the Swan Trade Mark on Every Tool

The James Swan Co.

SEYMOUR, CONN.

Bishops Refined "Greyhound" Steel Saw—A Masterpiece

Of the Saw Maker's Art. We are proud of its quality and guarantee it to cut faster and run easier in all kinds of wood, to hold its sharpness and set longer than any other good saws.

The "Greyhound" is the result of years of experimenting to originate a purity of steel with fine grain and tough body.

It's the Your-Money-Back-If-Not-Satisfied Saw

30 Days' trial will prove our guarantee

Made in both Straight and Skew Back.

Length	18	20	22	24	26	28	30 Inches
Dozen	$28.00	$30.00	$32.00	$34.00	$36.00	$40.00	$44.00 List

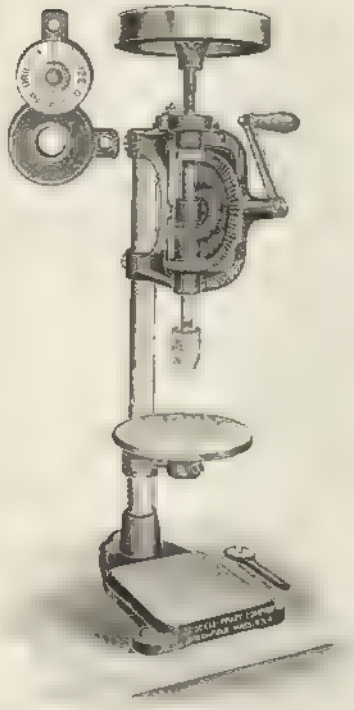
Packed One in a Box

SPEED EASE TRADE MARK.

Geo. H. Bishop & Company

Lawrenceburg, Ind.

Goodell-Pratt's



New

Bench Drills

with

Intermittent Feed

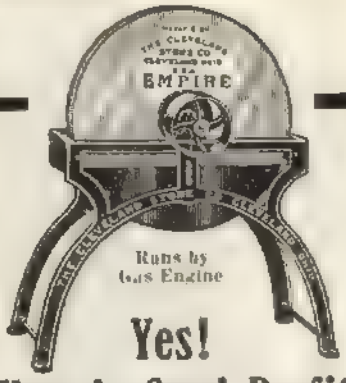
These Bench Drills, equipped with our new Intermittent Friction Feed, which is adjustable to the size of drill in use, together with the Quick Return of the spindle on the reverse, are proving very popular.

IT WILL PAY YOU TO GET A SAMPLE

Goodell-Pratt Company

Toolsmiths

Greenfield, Mass., U.S.A.



Yes! There's Good Profit Selling These Grindstones

In four ways: (1) on each individual sale, (2) each sale brings repeat orders, (3) customers are therefore induced to patronize your store for other goods and naturally (4) recommend their friends to you.

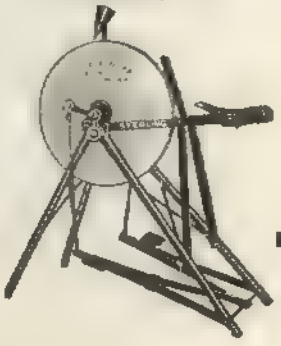
But none of these reasons would hold water if the second one wasn't the chief one, but it *is*—because

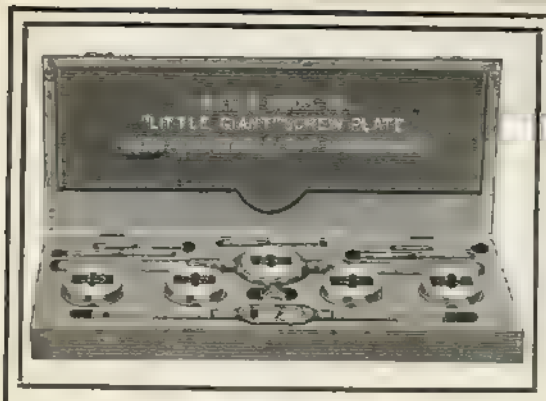
Cleveland Grindstones

are made exclusively of *genuine* Berea and Huron stones and everybody admits that only these stones contain the proper combination of grits and hardness that ensure keen edged tools. Edge tool and harvesting machine manufacturers know this well—that's why they use Cleveland Grindstones. We make Cleveland Grindstones in all sizes—for all purposes—power, hand or treadle—and we are thoroughly equipped to make stones for any demand made by your customers.

Write for Catalogue and Prices.

THE CLEVELAND STONE CO.
Cleveland, Ohio





Little Giant.

A READY SELLER

This is our No. 1 Assortment, cutting from 1-4 in. to 1-2 in. by sixteenths.

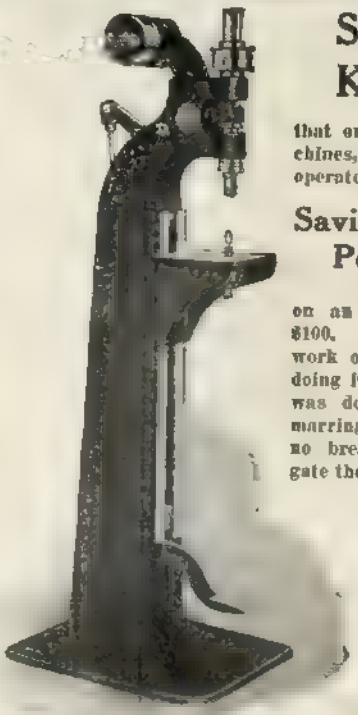
For all around work or for use by the amateur this assortment is unexcelled.

You should have this in your stock; the demand for it will be steady.

Write us for our **five best sellers.**

Wells Brothers Company
Greenfield, Mass., U. S. A.

Hardware Manufacturers Should Know



that one of these machines, with a boy as operator, is

Saving $4,368 Per Year

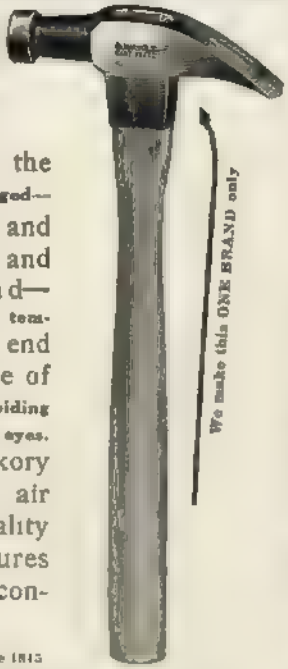
on an investment of $100. It is doing the work of eight men and doing it better than it was done before. No marring of the work—no breakage. Investigate the

Grant Noiseless Rotary Rivet Spinning Machine.

Send Samples of Your Work.

The Grant Mfg. & Machine Co.
SULLIVAN AVE., BRIDGEPORT, CONN.

SOLID CRUCIBLE CAST STEEL



Not open hearth—carefully pressed and repressed into shape, condensing the molecules of the metal—**not drop forged**—all are thoroughly and evenly hardened and prepared by hand—**not case hardened or tempered in bulk**—each end to a proper degree of hardness, **thus avoiding soft centers and brittle eyes.** Second growth hickory handles properly air seasoned. Quality and efficiency insures long wear and economy.

World's Standard since 1815

The David Maydole Hammer Co.
NORWICH, N. Y., U. S. A.

The Old and The New →

Both of

RUSSELL JENNINGS QUALITY

and backed by the RUSSELL JENNINGS GUARANTEE

You know the ordinary square shank. We now make our bits with the ordinary bit shank or our new *PRECISION* turned shank which is more rapidly and easily placed and once placed, stays put.

RUSSELL JENNINGS MFG. CO.
CHESTER, CONN.

Direct Representative, WILLIS H. SIMPSON, 30 Church St., New York City

TRADE H MARK
ON EVERY PIECE

Arrange your flowers in vases that are in harmony with the surroundings.

HEISEY'S H GLASSWARE

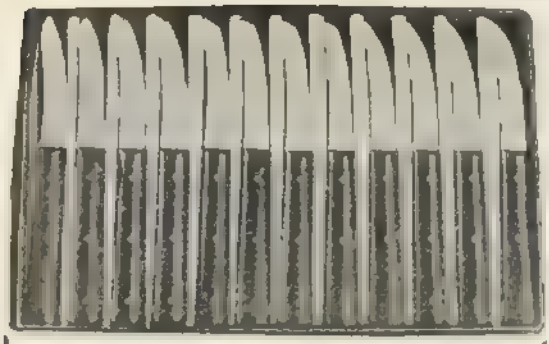
offers a variety of beautiful crystal vases in sizes, shapes and heights suitable for all flowers, from the delicate violet to the stately American Beauty.

441 No. 20 Flower
PATENT APPLIED FOR

WRITE FOR CATALOGUE 56

A. H. HEISEY & CO., Inc.
NEWARK, OHIO

HEISEY'S H GLASSWARE
TRADE MARK



No. 025

Assortment Kitchen Knives

Handles are of selected cocobolo, boxwood or ebony as ordered, securely fastened with 3 rivets.

Blades are of fine quality even tempered steel, ground sharp ready for use and of such shapes that meet the requirements of the user.

Packed in sets of twelve assorted, in display box.

Electrotypes furnished free.

Goodell Company

108 Main Street, ANTRIM, N. H., U. S. A.

New York, 10 Warren Street.

You Will Sell

More Freezers
If You Show the

Lightning Chipper

One helps the sale of the other. This little tool reduces a 20 lb. block of ice to small uniform pieces in five minutes, and overcomes the only real drudgery in ice cream making. Housekeepers quickly see the value of it, and it sells many a freezer where otherwise the sale of both would be lost.

Order Now

The Season Is On

NORTH BROS. MFG. CO.

Philadelphia, Pa.

Height 24 Inches

"LAST BUZZ"

DEAD FLIES BY GALLONS

PLACED OUT DOORS

NO HALF DEAD IN YOUR FOOD
NO STICKY FLIES
NO DISHES OF POISON

GALLONS OF DEAD

"LAST BUZZ"

FOR CITY STREETS — FOR CAFE KITCHENS
LIVERY STABLES — SALOONS
DAIRIES — MEAT MARKETS
ALL DOMESTIC PURPOSES

SHIPPED IN CARTONS

RICHLAND MFG. CO.

WASHINGTON C. H., OHIO

The Lookout

"It Rings for a Dollar."

Six inches high. Alarm shut-off. Two finishes, polished brass or nickel plated. Packed 12 in a box with advertising matter

WHAT if the Lookout was designed to sell—what if it was given good works—good looks—a good name and a popular price?

What if it is put up in a corking good box and leaves a nice fat profit on every one you sell—what if its sales have increased in less than 4 months from 160 to 1090 every day in the week—what if it's carried in stock by 325 wholesalers?

What if you can get your name printed free on dials in lots of 24—what if it is made in *La Salle, Illinois* by the *Westclox* people, designers of Big Ben?

66c

each in broken lots. 63c each in dozen lots

Less 2 per cent. 10 days. These prices only apply east of the Rocky Mountain line

Dealers' names printed free on the dials in case lots of twenty-four or more.

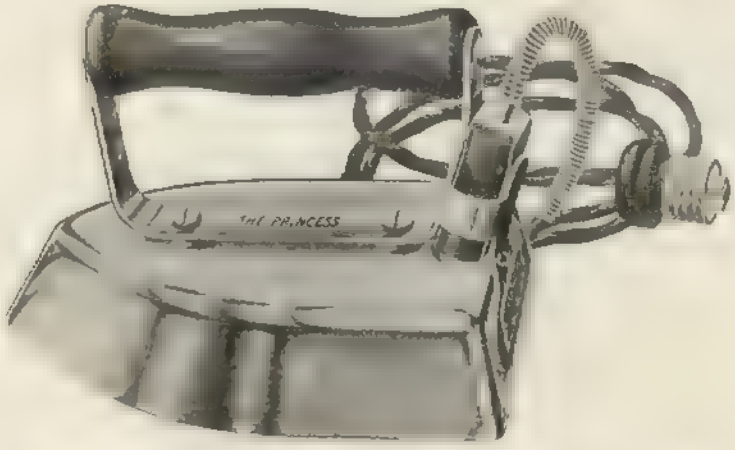
AN UNQUALIFIED GUARANTEE

With an Electric Iron is Unquestionably a Strong Talking Point.

THE PRINCESS

ELECTRIC FLAT IRON

Carries such a guarantee over a period of five years



The Princess Iron has created a sensation in the hardware world. It appeals immediately to hardware dealers. We are opening up hundreds of new accounts among them daily. The retail price is right and carries a **large margin of profit for you.** This iron is a product of much thought and has been perfected at enormous expense to us, it fulfills a long felt want. The demand is already created, it is all there waiting for you, be the first in your town who is in a position to fill this demand, get the cream. Write us today for our proposition, it means money to you and we feel sure you will be interested.

CHICAGO FLEXIBLE SHAFT CO.

614 LaSalle Avenue :: :: :: CHICAGO

16-18 Reade Street, NEW YORK

Myers Cushion Tire Store Ladder

The quickest acting and most convenient on the market. It permits the use of both hands and gives instant access to ALL shelves.

All wheels are equipped with rubber treads—practically noiseless and very easy acting. The ladder is of Georgia pine, nicely finished and varnished.

You ought to know more about this ladder. Full particulars will be sent on request.

F. E. MYERS & BRO. ASHLAND, OHIO

ASHLAND PUMP AND HAY TOOL WORKS

"Rapid" & "Korn King" Grist Mills

Just Out

Entirely New

Easy Running

Fully Warranted

The HEATH FDY. & MFG. CO., Plymouth, O.

"BLACK HAWK"

Shells Easily
Shells Clean
Does Not Scatter The Corn

Corn Sheller and Separator

Capacity 8 to 14 Bushels Per Hour

WEIGHT 15 POUNDS
ALL REPAIRS FREE

The Original and Genuine

Invented and Made Only by

A. H. PATCH
INCORPORATED
CLARKSVILLE, TENNESSEE

BEWARE OF IMITATIONS

Eska Self-Sealing Fruit Can

No Sealing Wax, Solder or Rubber Rings.

Just a little pressure on the lid is all that is needed.

It preserves the freshness of the fruit. It saves time and labor. Can be used more than once.

Made in 1 pt., 1 qt., 2 qt. sizes. Packed in Cartons.

Let us send you sample and quote prices.

Stuber & Kuck, Peoria, Ill.

ALWAYS ASK YOUR JOBBER FOR

"NEVER-BREAK" GOODS

"Pioneers of Steel Cooking Utensils"

THE AVERY STAMPING COMPANY

CLEVELAND, OHIO

TRADE MARK
STILLSON
REGISTERED U.S. PATENT OFFICE

Every Genuine Stillson Wrench Bears The above Trade Mark

The Genuine Stillson

is the most largely used and best known pipe wrench in the world.

The GENUINE

Stillson Wrench

has been manufactured by the Walworth Mfg. Co. for over forty years. We have experimented with many ideas for its improvement but have never been able to improve it.

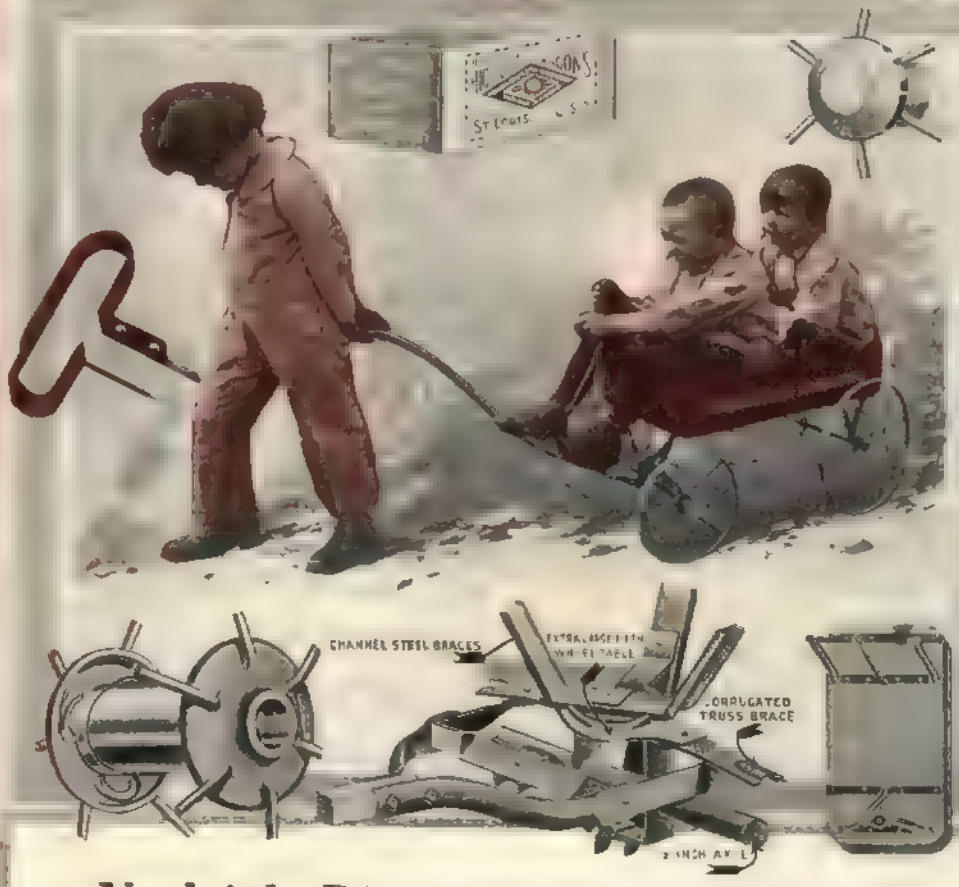
MADE ONLY BY

Walworth Manufacturing Co.

BOSTON, MASS., U. S. A.

NORVELL-SHAPLEIGH HARDWARE CO.
ST. LOUIS

NORVEL-SHAPLEIGH HARDWARE CO. TRADE DE MARK DIAMOND EDGE



Norleigh Diamond Boys' Wagons

Norleigh Diamond Boys' Wagons are better than the ordinary run of wagons. They are made strong and substantial to stand the excessive abuse children invariably give a wagon.

The axles are strong; the frame is so constructed and braced that it will withstand most any shock. The wheels have heavy spokes and rims and large barrel tubs. The bed has four heavy braces to keep it in shape and to give a better support for the frames. Under every bolt head and nut there is a washer to prevent the bolts from pulling through the bed

Then Norleigh Diamond Wagons are "Good Lookers." They are finely painted, both inside and out and underneath. Have brass plated hub nut caps, loop end bent handles; and are furnished in assorted colors.

Each wagon is packed in an individual carton so it reaches the dealer in perfect condition—no scratched wagons to sell at a reduced price

Made with steel rims; also with rubber tires

If you want to build a big boys' wagon business you need the Norleigh Diamond Wagon.

SEE OUR SALESMAN OR WRITE US.

"DIAMOND EDGE IS A QUALITY PLEDGE"

THE "UNIVERSAL" LINE

There's a "Universal" Caster for Every Caster Need.

Steel Horn Ball bearing Plate Caster

We manufacture the most complete line of casters for wood or metal furniture, metallic bedsteads, etc.

It means that there's a "Universal" caster for every caster need and that you can purchase a complete line of casters from one source of supply.

"Universal" casters are well known amongst the trade for their superior construction, the results of many years' experience and progressive manufacture and users have come to realize the superiority of "Universal" casters and to demand them.

It means that the "Universal" Line offers to the Hardware Merchant exceptional opportunities for larger caster business and profits.

Our modern plant recently completed is the largest of its kind devoted to the manufacture of casters.

Our large output enables us to offer good service and casters at the right prices.

You should know more about the "Universal" Line.

Catalog No. 75-R sent upon request

Universal Caster & Foundry Co.

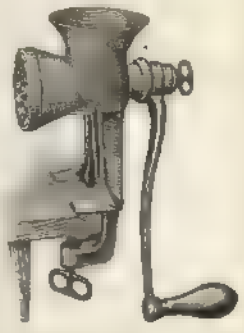
1170 BROADWAY, NEW YORK

"UNIVERSAL" PRODUCTS ARE CARRIED IN STOCK BY THE LEADING JOBBERS

THE DANA PEERLESS FREEZER

WITH FLY WHEEL—FURNISHED WITH CRANK

Admirably adapted for large families, small hotels, cafes, and ice cream parlors. Get same results as with the three minute smaller size. There is no reason why the hardware dealer should confine his efforts to the small size only. Here is a chance to get in the game right. Better send for prices today.



DANA MEAT AND FOOD CHOPPER

Will cut any kind of meat, no matter how sinewy, and none is ever left in the chopper. Its a good chopper, and one which the dealer, need not hesitate to recommend. Send for prices.

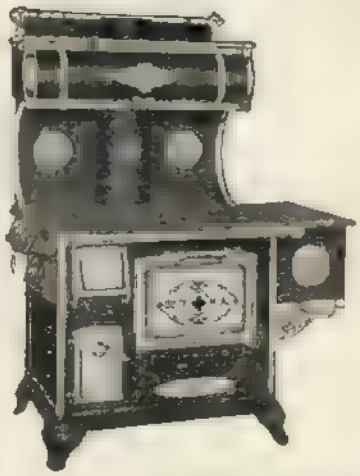
WRITE TO DEPT D

THE DANA MANUFACTURING COMPANY

CINCINNATI, OHIO

Examine the Flues in the

"QUICK MEAL" STEEL RANGE



With White Porcelain Decorations

The Handsomest Range Ever Produced. The only range with Porcelain lined flues. Made with reservoir either at Right End or Left End.

ABSOLUTELY RUST PROOF

Entire back walls inside and outside are Porcelain. All flues are Porcelain, hence this new

QUICK MEAL STEEL RANGE IS INDESTRUCTIBLE

If you want exclusive Agency, write at once to

RINGEN STOVE CO.

Div. American Stove Co.

SAN FRANCISCO, CAL.
Indiana St., Between 20th and 21st

825 Chouteau Ave.
ST. LOUIS, MO.

NEW CATALOGUE NOW READY

The Quality

MADE OF WROUGHT IRON NOT LIGHT STEEL

Weight—Looks—Baking Qualities—

Combined with a Hot Blast Fire Box makes The "Quality" Range an ideal one for the dealer to handle.

WE ASK YOUR BUSINESS ON QUALITY

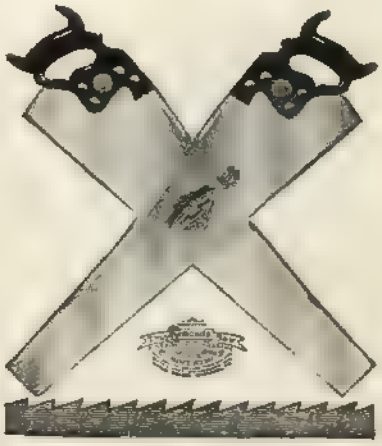
Every known feature of convenience as well as some that are distinctively its own, are embodied in its makeup.

Made Either Cabinet or Leg Base.

Write for Catalogue and Prices.

Quality Stove and Range Co.

BELLEVILLE, ILLINOIS



The question is not what Hand Saw you will sell but,---How well will you satisfy your Carpenter customers? Their trade means more to you than merely buying Saws.

SIMONDS SAWS

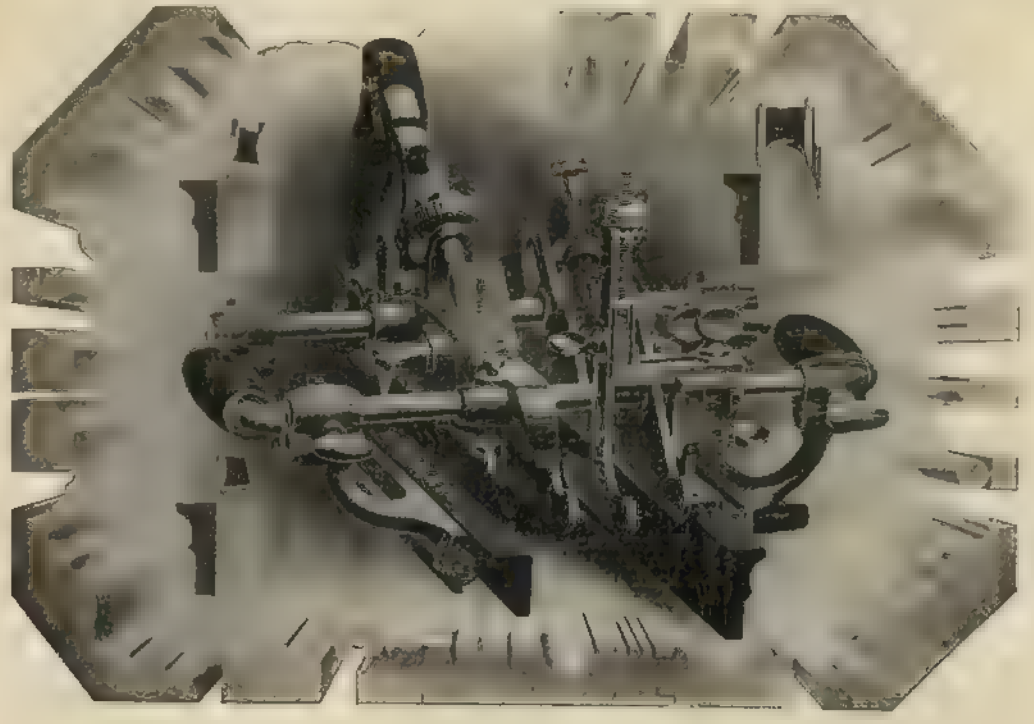
because of quality of material and excellence of finish make an attractive saw to sell and a satisfying saw to use. Catalog and Dealers' Discounts sent on application. Your orders will receive equally prompt attention, whether sent through Hardware Jobbers or direct to any office named below.

Simonds Manufacturing Company

Fitchburg, Mass.
New York City
Portland, Ore.
Vancouver, B. C.

Chicago, Ill.
New Orleans, La.
San Francisco, Cal.
Lockport, N. Y.

Montreal, Que.
Seattle, Wash.
London, Eng.
St. John, N. B.



Stanley Tools

The above cut shows the STANLEY UNIVERSAL "55" PLANE together with samples of mouldings that can be made with the fifty-two cutters furnished with the Plane.

This well-known tool has earned for itself with carpenters and mechanics the reputation of being "A PLANING MILL WITHIN ITSELF." With it a greater variety of work can be done than with any other Plane or set of Planes now on the market.

It is 10 inches long and weighs only 7 3-4 lbs.

Display it with its cutters in your window and see that your tool using customers receive literature regarding it, which may be had for the asking.

The List Price is $14.00—a profitable tool for you to carry

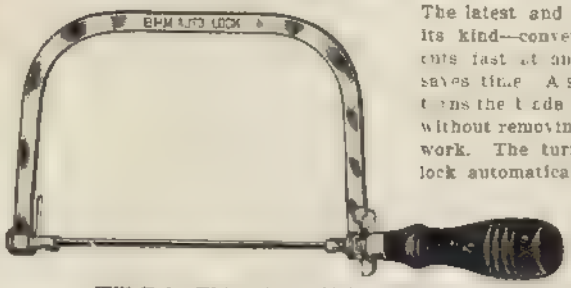
STANDARD THE WORLD OVER

Stanley Rule & Level Co.
New Britain, Conn. U.S.A.

EVERY TOOL GUARANTEED

AUTO-LOCK COPING SAW

CUTS EITHER WOOD OR METAL



The latest and best tool of its kind—convenient to use—cuts fast at any angle and saves time. A single motion turns the blade to any angle without removing it from the work. The turning devices lock automatically and hold the blade in any position

Will Take Either 6 or 6½ Inch Blades of Any Make.

THE BRIDGEPORT HARDWARE MFG. CORP.,
BRIDGEPORT, CONN., U. S. A.
Send at Once for Circulars and Prices

GRAB'S FOOT SCRAPER

One of the most practicable and quick selling articles on the market. Saves the scuffles, time, trouble, floor and temper. Cleans sole and brushes sides of shoe in one operation.

Has ten parallel leaning plates all handsomely nickeled and held rigidly in place. Metal strip at each end keeps a space between these plates, which prevents clogging. Bristles are made of best stiff bristles and may be quickly replaced when desired. Scraper attaches easily and quickly to any doorstep or handy place and may be easily rotated and cleaned or swept under. Lasts a lifetime. In use at all seasons.

Retail Price $1.00 each

VICTOR M. GRAB & CO., CHICAGO

TANK LUGS

Patented April 1, 1902

ALL SIZES

Both Flat and Round Band Lugs for TANKS, SILO AND KILNS

RACINE TANK LUG CO., 26 Clark St., Racine, Wis.

CALDWELL IMPROVED SCREEN DOOR CHECK

STOPS THE SLAMMING OF SCREEN DOORS

Printed directions and pamphlet for placing, furnished with each check

MADE BY

Caldwell Mfg. Co.
6 Jones St. Rochester, N. Y.

EDWARDS "QUEEN ANNE" METAL SHINGLES

ARE PROFIT PRODUCERS FOR DEALERS

They make a handsome long wearing roof. They do not warp or rot like wood shingles or crack and fall off like slate. As they are applied only with hammer and nails, there are no soldered joints, and may be easily removed from one building and put on another if desired. Manufactured from best quality Worcester grade Terne Plate, furnished either Painted or "Tightcote" Galvanized, size 10x14 inches

Descriptive Booklet, Samples and Prices sent free to dealers

The Edwards Manufacturing Co.
"The Sheet Metal Folks"
510-520 Eggleston Ave., Cincinnati, O.

HILL'S CLOTHES DRYERS

Nearly a million in use and not one dissatisfied customer. Write for prices.

Hill Dryer Co. 318 Park Ave. Worcester, Mass.

DO YOU USE

KICK PLATES

We issue a price list on Kick Plates containing 576 separate prices. You shall have a copy.

Our line includes Push and Pull Plates, Door Guards, Marble Trimmings, Threshholds, Brass Railings.

THE IMPERIAL BRASS MFG. CO.
461 S. Jefferson St. • • Chicago

give a double bearing and prevent the elbow from working apart from the pipe. This company manufacture stove pipe made from the same material and with the same double beaded end on which they have secured a patent, and advise they are having a large sale on these goods.

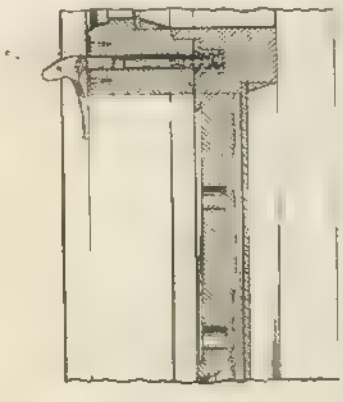
STEVENS' "DREADNOUGHT"

The accompanying illustration shows the Stevens' "Dreadnought" Shotgun, No. 85, manufactured by the J. Stevens Arms & Tool Company, Chicopee Falls, Mass. This model is manufactured in 12-gauge only, weighs 7½ pounds and has an extra heavy breech and

case hardened frame. It is supplied with plain extractor in 26, 28, 30 or 32-inch. The list price is $7.00. The No. 89 "Dreadnought" has automatic ejector and is listed at $7.50. These guns have the famous Stevens guarantee behind them and are staunchly constructed, serviceable models offered at moderate prices. Jobbers generally handle these guns, and the manufacturers will be pleased to furnish merchants with descriptive matter and electrotypes.

THE GIBRALTAR VENTILATING SAFETY WINDOW LOCK

The American Lock Company of 305 Fifth avenue, New York City, have just placed on the market a new ventilating window lock which was patented on April 9, 1912. This lock does away entirely with a catch or fastener in the middle of a window. The Gibraltar Ventilating Safety Window Lock is placed on the side rail of a window and is generally hidden from sight by the window shade or curtain. The lock is devised to afford absolute safety when the window is closed or when it is open three or six inches from the top or bottom or both. The only way this can be defeated, is by breaking the glass or the window frame itself, and it is so ingeniously devised that it will prevent the rattling of a window whether open or closed. It draws the sashes so tightly together that it is claimed to save over 10 per cent of coal bills, as it keeps out the cold air in the winter time without the necessity of using weather strips. It is made of solid brass and it is manufactured so as to retail at 50 cents complete. It can be attached to any window, old or new, without removing either sash.



WAGNER LEADER DOOR HANGER

The Barn Door Hanger, herewith illustrated, has recently been brought out by the Wagner Mfg. Company, Cedar Falls, Ia. They call particular attention to its cam vertical adjustment feature, which is applicable to eight or ten different types of hangers which the company manufacture. The accompanying illustration is of the Wagner Leader Hanger No. 503,

which is said to follow out the idea of simplicity with the up and down adjustment feature added.

For doors 1¾-in. thick the hanger has 2-in. wheels; is flexible; has tandem trolley, wide tread, quiet, roller-bearing wheels; is fitted with solid malleable hanger bar with bumper on end; is used in connection with the company's self-cleaning track. The brackets are all alike. The removable end cap makes it possible to use brackets anywhere, either right or left on ends, or along middle of track.

The company will be pleased to send catalogue illustrating and describing their entire line on request.

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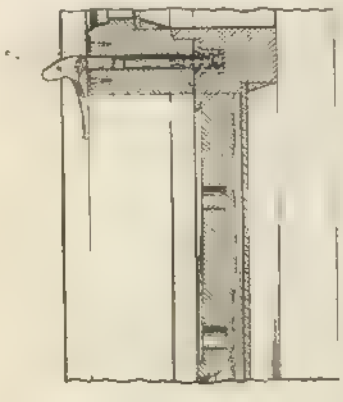

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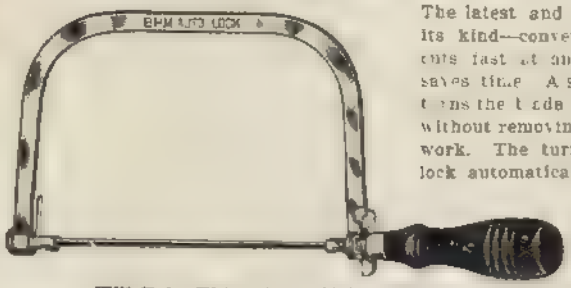
AUTO-LOCK COPING SAW

CUTS EITHER WOOD OR METAL



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THE IMPERIAL BRASS MFG. CO.
461 S. Jefferson St. • • Chicago

The Perfect Level Co. Manufacturers of **High-Grade Bricklayers, Masons and Carpenters Levels**

327 Leland Street
DETROIT, MICH.
Write for interesting Catalogue—Big discount

FORSTNER BITS

"One of the Most Remarkable Tools for Wood-working ever Invented."

For Smooth, Round, Oval Boring, Scroll and Twist Work.

Supplied for Brace or Machine Use

SPECIALLY ADAPTED FOR HARD WOOD WORKING

The Forstner Labor Saving Auger Bit, unlike other bits, is guided by its *Circular Rim* instead of its centre, consequently it will bore any arc of a circle, and can be guided in any direction regardless of grain or knots, leaving a true polished surface. It is preferable and more expeditious than chisel, gouge, scroll saw or lathe tool combined, for core-boxes, fine and delicate patterns, veneers, screen work, scalloping, fancy scroll twist columns, newels, ribbon moulding and mortising, etc.

Manufactured and Sold by

THE PROGRESSIVE MANUFACTURING CO., Torrington, Conn., U. S. A.

Genuine Armstrong STOCKS AND DIES

For Cutting Pipe or Bolts. Bolt Dies fit Regular Stocks.

Also Manufacturers of
Hinged Pipe Vises
Pipe Cutters
Pipe Wrenches
Tap Wrenches
Catalogue on request.

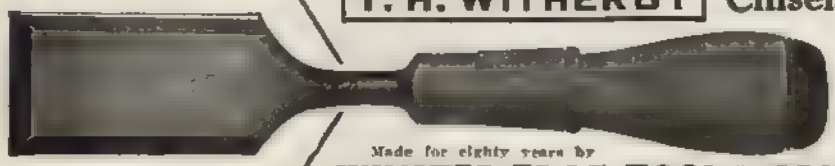
THE ARMSTRONG MFG. CO.
312 KNOWLTON ST., BRIDGEPORT, CONN.
New York Chicago

A Line of Over 3000 Guaranteed Mechanics Tools.

Tools That Are Made Purposely Good.

150-152 CHAMBERS STREET, NEW YORK, U. S. A

T. H. WITHERBY Chisels and Gouges



are tools that are unsurpassed for cutting qualities. All good mechanics know their reputation. You can't go wrong stocking them.

Made for eighty years by
WINSTED EDGE TOOL WORKS, Winsted, Conn.

VAN CAMP HATCHETS

They always benefit the dealer who handles them. A really beautiful tool, perfect in efficiency, unequalled in quality.

The VAN CAMP "Trade Mark" insures the dealer, the VAN CAMP HATCHET itself practically insures an increased business.

No other proof of quality is necessary if you find VAN CAMP stamped on a TOOL.

VAN CAMP HARDWARE & IRON CO.

INDIANAPOLIS INDIANA

Black Diamond File Works

ESTABLISHED 1863 INCORPORATED 1895

Twelve Medals of Award at INTERNATIONAL Expositions

Special Grand Prize GOLD MEDAL Atlanta 1895

Copy of Catalogue will be sent free to any interested File User upon application.

G. & H. Barnett Company - - Philadelphia, Pa.

Owned and operated by Nicholson File Co.

AMERICAN STANDARD FILES AND RASPS

ESTABLISHED 1868

McCAFFREY FILE CO. PHILADELPHIA

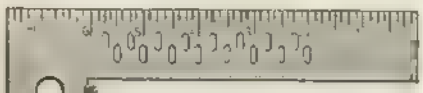
DELTA FILES

HIGHEST GRADE FILE MADE. THE FILE YOU WILL EVENTUALLY USE

DELTA FILE WORKS, Philadelphia

Chicago Office, 108 W. Lake St. New York Representatives, Mess. Dilworth, Lockwood & Co., 25 Warren St.

FILES OF QUALITY



Scribing Square

A New Line Try Squares and Bevels — Steel Levels, fine finished. The only A1 Take Down Square.

Wood Screws Curry Combs Hardware Specialties

Southington Hardware Co., Southington, Conn.

WE WANT YOUR INQUIRY

HIGH GRADE

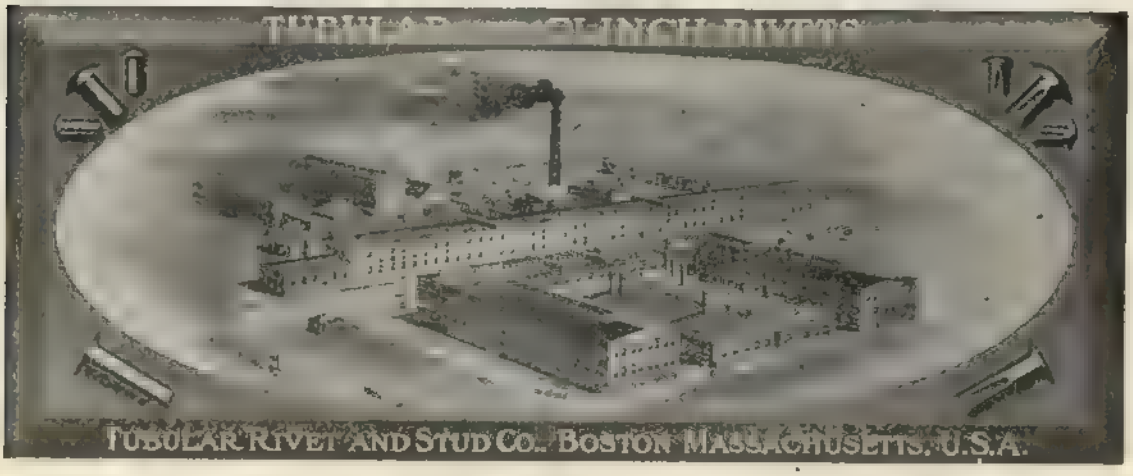
THE REX FILE & SAW CO., NEWCOMERSTOWN, OHIO

Cold Punched Nuts—Semi-Finished Nuts

Garland Nut & Rivet Co. Pittsburgh, Pa.

Address "Desk 29"

Central Steel & Supply Co., Railway Exchange Bldg., Chicago, Ill.
J. F. Lambert, Audubon Bldg., New Orleans, La.
Geo. W. House, Ford Bldg., Detroit, Mich.
Barrett & Ewing Co., No. 5 First St., San Francisco, Cal.



Clean
teeth
for
Beauty

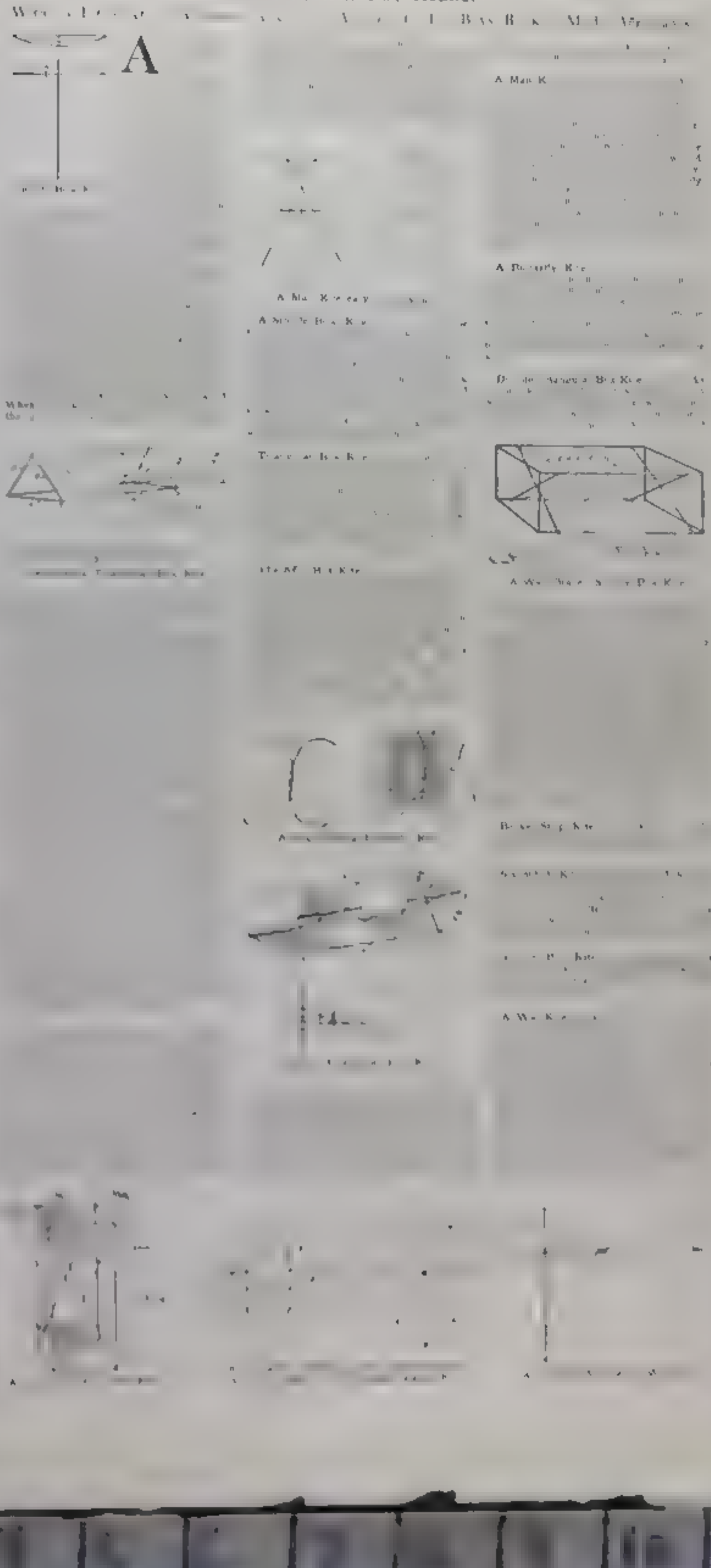
Sound
teeth
for
Service—

COLGATE'S
RIBBON
DENTAL CREAM

for Both

Ten Practical Kites

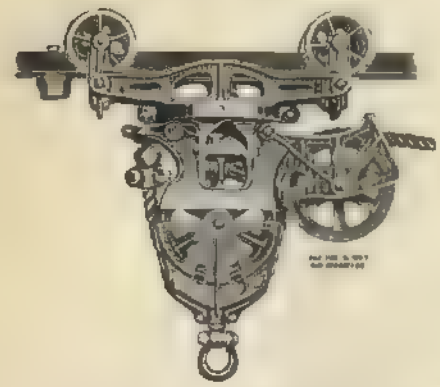
Made by Our Boy Readers



HAY CARRIERS

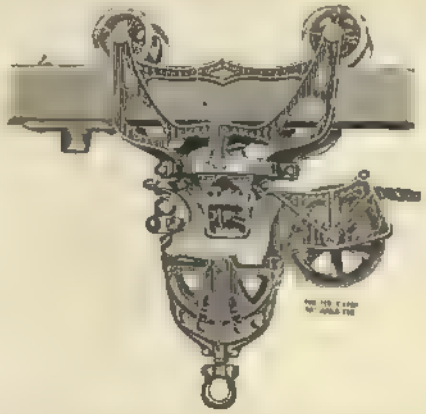
THE "NEW ACME" SWIVEL AND REVERSIBLE HAY CARRIERS

STEEL TRACK



No. 100. Fitted with independent trucks, to operate on "New Acme" steel track and for use with rope, finished in aluminum, weight 34 lbs., each.....$8.00
Trip Pulleys for No. 100 Carriers, each.....

WOOD TRACK

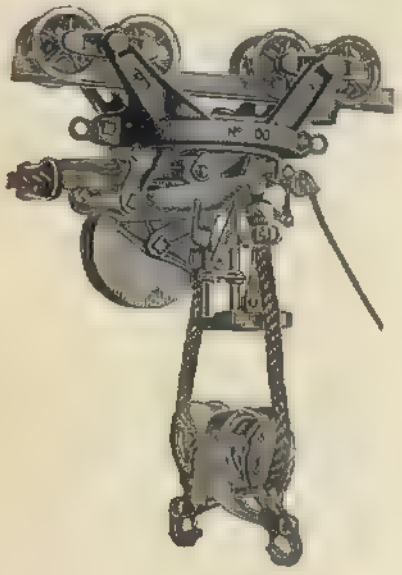


No. 200. To operate on 4x4 in. wood track and for use with rope, finished in aluminum, weight 41 lbs. each.....$8.00
Trip Pulleys for No. 200 Carrier, each.....

The pulley sheaves are 7 in. in diameter and the rope wheels 6 in. in diameter and fitted with steel bushings, recessed into the frame. The fork pulley is fitted with a swivel clevis for holding the fork. The "New Acme" carrier will work out of either side of the stop, it is not necessary to swivel the carrier while it is on the stop. Made of the best grade of malleable iron and all parts are carefully fitted.

THE "NEW ACME" STEEL TRACK SWIVEL AND REVERSIBLE SLING CARRIERS

Rigged for Double Hoist



No. 500. With eight wheel independent trucks, to operate on "New Acme" steel track and for use with rope, finished in aluminum, weight 53 lbs., each.....$13.00

The sling carriers are made on the same pattern as the hay fork carriers and will be found most satisfactory.

"NEW ACME" STEEL TRACK AND FIXTURES

"New Acme" Steel Track, per foot.....$0.20
"New Acme" Steel Track Couplings, each.....10

Trip or Stop for Steel Track

Trip or Stop for "New Acme" Wood Track Carriers

Rafter Bracket No. 25

Acme Hanger Hook

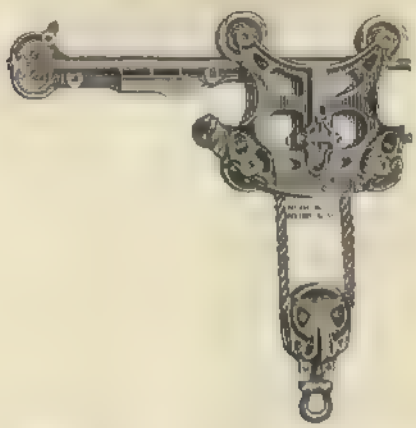
"New Acme" Trip or Stop, each.....$0.50

The stop for wood track is similar to the stop for steel track except it is made with a plate with bolt holes in place of lugs.

No. 25. Rafter brackets, per dozen.....$0.60
Acme Hanger Hooks, per dozen.....1.40

HAY CARRIERS

"NEW ACME" ROD OR CABLE CARRIERS



No. 700. "New Acme" Rod or Cable Carrier, finished in aluminum, weight 39 lbs., each $7.00

The stop swings on the rod or cable so the carrier can enter at any angle. The track and rope wheels have ball bearing hubs, accurately fitted on bushings, recessed into the frame

COLUMBUS DOUBLE ANGLE STEEL TRACK HANGERS

No. 4. Columbus, open bell swivel reversible carrier, pass trip block while in operation, for metal cable rope, track bolts and sleeves for use on turned steel bushings, each. $7.00

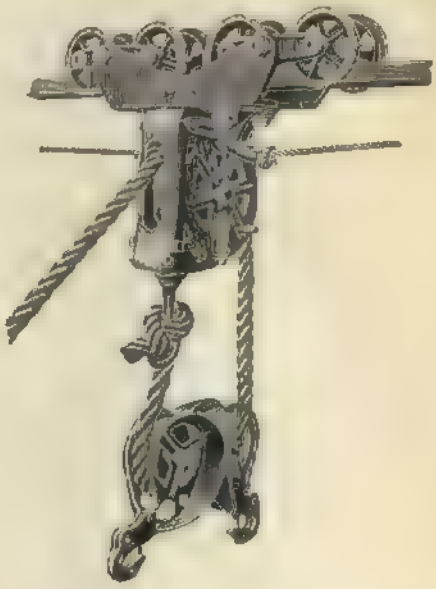
DOUBLE ANGLE STEEL TRACK AND HANGERS

No. 20. D. A. steel track, per foot..... $0.20

Couplings are included with track

No. 25. D. A. track hanger, open, each..... $0.12
No. 30. D. A. track hanger, closed, each ..... .12
No. 35. Board hook, closed, each ..... .12
Trip block for Columbus hangers, each..... .25

THE "NEW ACME" CROSS DRAFT SLING CARRIERS



No. 25. "New Acme" Cross Draft Sling Carrier, finished in aluminum, weight 42 lbs., each $13.00

This carrier will operate on steel track of any width and may be used with hangers on two tracks. Takes less rope than other sling carriers and can be used on old steel track with which the horn may be fitted

WOOD TRACK HAY CARRIERS

No. 5. Open bell, swivel reversible, for fork, will not pass trip block while in operation, each.. $7.00

The Great Western Automobile Company, of Peru, Ind., has announced for 1913 a 40 h. p. car, which is a development of previous models of the Great Western product. The 1913 line includes the five-passenger touring car painted deep blue, a four-passenger painted automobile blue, a two-passenger painted chrome yellow orange with ivory jet black trimmings, and a four-passenger sedan closed body, painted deep coach blue. The four and five-passenger touring cars and roadster sells for $1585, and the enclosed body type sells for $2250.

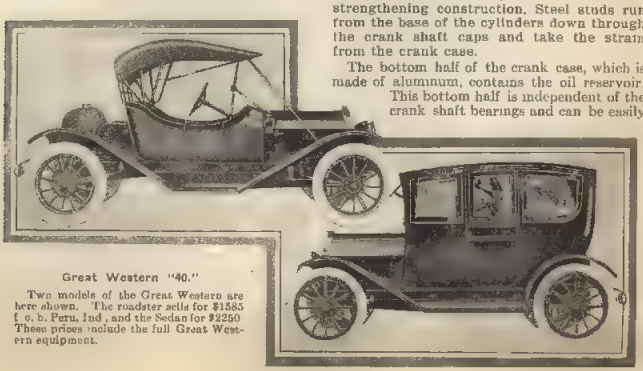
The Power Plant and Cooling System.

The Great Western motor is contained in a unit power plant, which is built along the same mechanical principle as has been in the past, but has several new added features designed to make it a more silent power plant. The motor has been increased in power, due to a 4¼ in. bore and 5½ in. stroke, with valve on the side enclosed. The cylinders are of the L head type cast separately, with both intake and exhaust valve enclosed on one side. The pistons are designed with convex heads, said to strengthen the construction and keep the head free from deposit. Four eccentric expansion rings are fitted to the pistons and six oil grooves are provided to distribute oil to the cylinder walls. A new feature in this piston is an oil groove around the piston, with holes for returning surplus oil.

The crank shaft, as heretofore, is made of five bearing construction with 15 11-16 in. of actual ground main bearing surface. It is offset from the center of the cylinders, with nickel Babbitt die cast bearings used throughout. The cam shaft is made from a solid drop forged steel bar and operates in phosphorus bronze bearings. A new feature in this motor is the use of roller valve lifters, the rollers following the contour of the cams so that there is no slapping noise. The valve stems are of steel hardened and ground and the valves are gray iron electrically welded to the stems.

The crank case is again cast from aluminum in I-beam section, for the sake of strengthening construction. Steel studs run from the base of the cylinders down through the crank shaft caps and take the strain from the crank case.

The bottom half of the crank case, which is made of aluminum, contains the oil reservoir. This bottom half is independent of the crank shaft bearings and can be easily

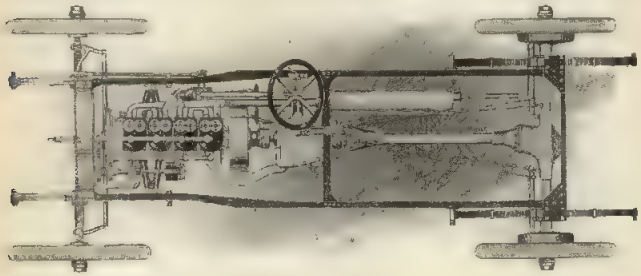


Great Western "40."

Two models of the Great Western are here shown. The roadster sells for $1585 f. o. b. Peru, Ind., and the Sedan for $2250 These prices include the full Great Western equipment.

removed without disturbing the rest of the motor. Hand hole plates have been placed in the bottom half of the crank case above the oil level, so that connecting rod adjustments can be made without removing the crank case bottom half. The spiral timing gears run in a separate compartment of the crank case, which is automatically lubricated from the regular crank case oil supply. The motor lubrication is accomplished by a two-gal. reservoir contained in the lower half of the crank case.

Cooling is by water circulation with an extra large tube radiator of the honeycomb type, fitted on the frame by brackets that have no contact with the water space. The motor is fitted with aluminum water pipes that have no joints to leak.



Great Western "40" Chassis.

Chassis view of Great Western "40" 1913 car is here shown, giving an idea of the new type of cylinders, of tie rods behind the front axle, of unit power plant and how it is suspended, and of full floating rear axle.

Clutch and Transmission.

The aluminum cone clutch operates in the flywheel. The angle of the cone has been slightly changed from previous model, so that it works more gently, but after having gripped firmly will not slip. The cone is faced with copper woven asbestos over six flat springs imbedded on the periphery of the cone.

The selective type transmission is three speeds forward and one reverse, and is housed in an oil tight aluminum case. Glands and packing nuts are provided to prevent oil leaking from the case. The spline and counter shafts are side by side, all gears traveling in an equal amount of oil. Both shafts and the spline shaft bearing turn in double row ball bearings.

Axles and Steering Mechanism.

The front axle is a large I-beam drop forging of special nickel steel with the tie rod behind the axle. This axle has a clearance of 12 in. The rear axle is full floating type with a large inspection plate at the rear and is fitted with double row ball bearings and high duty Hyatt bearings for the differential.

A large steering wheel is used in connection with a strong well proportioned steering gear of the worm and full gear type.

Springs and Control.

The front springs are 40 in. long, semi-elliptic and the rear springs are ¾ elliptic, 47 in. long. These springs are chrome vanadium steel with ribs on each side to prevent the spring leaves from spreading or shifting.

The control is by an H plate at the driver's right, inside the body. Double internal brakes 12 in. in diameter are used and the brake rods are equipped with equalizer. The latest type Schebler carburetor with auxiliary automatic vacuum valve is used and ignition is by the dual system, using the Remy magneto, with concealed coil and dash kick switch and lock.

Body and Equipment.

The pressed steel frame is narrow in front to allow short turning, with a new wheel base of 118 in. The Great Western bodies are a combination of steel and wood, with door hinges concealed, leaving the outside of the body free from projections. All equipment and body trimmings on these 1913 cars are black and nickel and the regular equipment includes: A mohair top, rubber dust cover, rain vision ventilating plate glass windshield, a speedometer, self-starter, electric lights, flush electric dash lights, electric signal, foot rail, robe rail, gasoline tank gage, extra demountable rim, tire irons, tool box, tools and tire repair kit.

Mercer Automobile Company, Trenton, N. J., has found it necessary to construct an additional factory building. The structure will be of the saw-tooth type, 160 x 161 ft., and will house the assembling, finishing and painting departments, as well as the tin shops, riveting shop and store room.

Detail View of the Fly wheel, Crank Shaft and Piston Assembly.

Attention is called to the construction of the fly wheel in which it will be seen the the weight is contained mostly in the rim.

lever governing the operation of the belt and the control of the clutch. The Eclipse free engine clutch is standard equipment on model K. The frame is of the keystone type. The drop bar gives low saddle position, while a well braced steering head effectively supports the front wheel.

The Pope spring fork of three leaf plate type is used. A new rocker plate is used, which makes it impossible for the rocker plate to strike the fork sides. Lubrication is by splash and force pump. The control is double grip, the right grip operating the compression relief and the magneto, and the left grip the throttle. The power is transmitted by a 1¾ in. flat endless belt. The belt is tensioned by the lever conveniently located on the left side of the operator.

The wheel base is 56 in., and the wheels are 28 in. The tank has two compartments, having a capacity of 2 gals. of gasoline and 2 qts. of oil. Large mud guards are used, same being 21 in. long and 3¾ in. in width. Plenty of clearance is allowed for between the tire rim and mud-guard, so that 3 in. tires can be used. An up-to-date addition has been made to model K in the shape of a large metal tool box, placed between the seat mast and the rear guard. A large door gives easy access to the complete set of tools, including wrenches, pliers, tire repair outfit, etc., contained therein. A large tire pump fastened to the frame, and a quart of oil are additional articles of equipment furnished with each machine.

Another New One

The Crawford motorcycle, made in Saginaw, Mich., by R. S. Crawford and F. H. Clum, is one of the latest 1913 additions. The makers are now buying parts for the new machine, of which 1000 are contemplated for this season. The new machine has a Spacke twin motor, spring fork and spring seat posts, Troxel saddle and Eclipse clutch equipment. A specially designed two speed machine is also promised by the same concern. The machines will sell for $275.

Motorcycle Belt Oil

"Watertight" is the name applied to a motorcycle belt oil which is manufactured by the E. Smith Manufacturing Company, 310 Clay Street, San Francisco, Cal. This belt oil is claimed to preserve the leather and also the stitching in the belts, and prevent same from becoming hard or cracked It is said to give a better friction to the belt since it penetrates the fibres of the leather. Every material used in the manufacture of water tight belt oil is said to be beneficial to leather. This oil comes in cans from ¼ pt. to 1 gal. and in price from $.15 to $1.03.

Jenkins & Company, state agents for Excelsior and Indian Motorcycles, are located in new building on Locust Street, Des Moines, Ia.

The Goodyear Tire & Rubber Company is making a strong appeal to the motorcycle user in the shape of a tire bulletin, which treats almost entirely of the recent F. A. M. Columbus meet.

The Majestic Manufacturing Company, of Worcester, Mass., is bringing out a new delivery van. A new fine side car is also under course of construction, and will be publicly announced within the next few weeks.

The Hide, Leather & Belting Company, of Brightwood, a suburb of Indianapolis, is erecting a two-story concrete factory. This company announces a recent order from the Pope Manufacturing Company for 275 flat belts.

California Motorcycle Company, of Los Angeles, Cal., has moved from the corner of 16th and Hill Streets, to a spacious store at 818 South Main Street, within a few blocks of the city's motorcycling center. The company handles the Eagle and M-M machines.

The Monarch Motorcycle Company, of Owego, N. Y., announces that it is contemplating the building of 2000 motorcycles for the season of 1913. In addition to the present Monarch "5" single, a new 10 h. p. twin will be built, the first of which will be tested out during the early part of October.

Mr. Fred Whitfield, secretary of the Excelsior Manufacturing & Supplies Company, died at the Mercy Hospital, in Chicago, Saturday, August 2nd, after a short illness. Mr. Whitfield was attorney for Ignaz Schwinn, the principal man in the Excelsior Company since its reorganization.

New Factory For Minneapolis

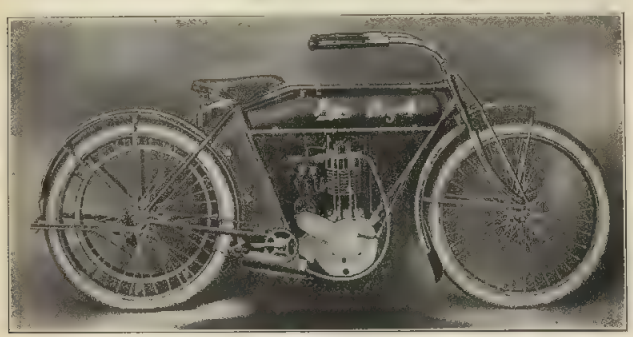
The Minneapolis Motorcycle Company, Minneapolis, Minn., is planning the construction of a factory which will increase the output nearly five fold. The factory will be located in the outskirts of the city, and will be a two-story fireproof building 250 x 300 ft. and will cost about $100,000.

Pope Model K Motorcycle

The model K motorcycle just brought out by the Pope Manufacturing Company, of Hartford, Conn., is the logical development of the model H machine which was featured by the Pope Company the past season. The new machine is more powerful and speedier than the model H. Both models will be manufactured for the coming season, the model H being recommended to those who want a machine with plenty of power and light weight, while model K is designed for the rider who desires everything in the way of additional speed and power.

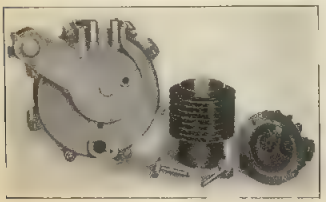
The motor in model K is rated at 4 h. p., and has a piston displacement of 30.50 cubic in. The cylinder is offset. The head is cast separately so that the inside of the head can be machined, which results in the most accurate surface and hinders the collection of carbon. Any carbon that should collect can then easily be removed. The valves are located in the head, a feature which is new in motorcycles. Both valves are interchangeable and are operated mechanically. The flywheels are 9 in. in diameter and total 25 lbs. in weight. As will be noted from the illustration the bulk of the weight is in the rims where it is most effective. The flywheel is mounted in phosphor bronze bearings.

Another feature lies in the clutch and idler lever, which is a combination affair, one



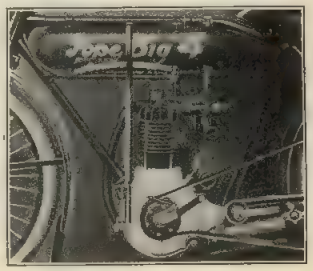
The Pope "Big 4" Single Cylinder Model K Motorcycle.

The above illustration shows the latest product of the Pope Motorcycle works at Hartford, Conn. It is known as the model K, and embodies some distinctive features, among which may be mentioned an offset cylinder; valves in the head interchangeable and mechanically operated; separate cylinder in head, and combination clutch and idler, operated by one lever.



Details of the Cylinder and Crank Case.

This view shows plainly the position of the valve seats in the cylinder head. The spark plug opening may be seen directly above the valve seats. Note the simplicity of the crank case and cover plate for magneto drive gears



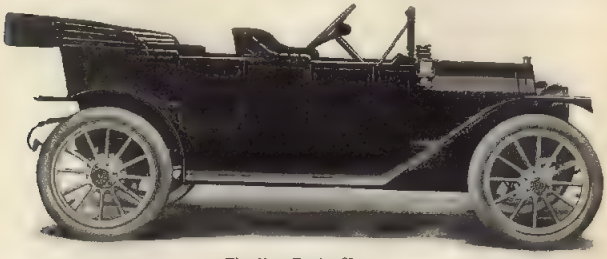
Another View of the Motor.

This view shows the belt side of the Pope Big 4." The combination clutch and idler are operated by one lever. The magneto is placed in back of the motor.

The New Empire 25

The Empire 25 is the name assigned the product of the recently organized Empire Automobile Company of Indianapolis, Ind. This concern has no connection with a previous organization bearing a similar name. At present, cars are being built at Greensville, Pa.

The Empire 25 is smart in appearance, is fitted with a flush sided, fore-door touring body and sells for $850, f. o. b. factory. Wheel base is 104 in., sufficient to ensure easy riding, when it is considered that the rear spring equipment is three quarter elliptic.



The New Empire 25.

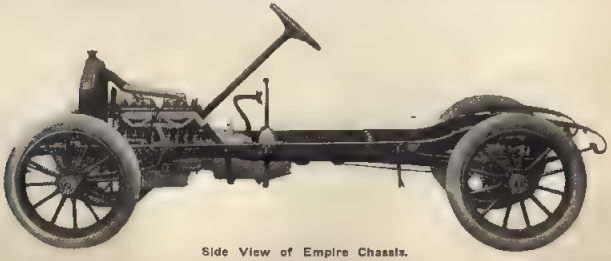
Empire 25 chassis equipped with aluminoid steel straight line, flush side vestibule body; dash is cast with integral shroud, door handles are within the body and the seat cushions, wide and broad, are slanted. The fenders are well aproned and extend over the wheels; running boards supported by two heavy steel brackets. This car is 104 in. wheel base and sells for $850 f. o. b. factory.

Motor Details.

The motor is a Golden, Belknap & Schwartz type, 3½ x 4½, L head cylinders, cast in pairs, water jackets integral. The crank shaft is drop forged, supported in three main bearings, front 1½ x 3½, center 1½ x 2¾, rear 1⅝ x 4 in., with crank pins 1½ x 2 in.

Valves are 1¾ in. diameter, 1½ in. clear opening ¼ in. lift; heads, gray iron, fused to steel stems. Springs are enclosed in telescoping housings or steel tubes, clamp screw retained. The one piece cam shaft is Babbitted to place in a cast iron cover plate of the crank case and easily removed. The valve tappets have their bearings in the crank case cover.

The cast iron crank case is barrel type, with large hand hole covers so that the connecting rods and main bearings are accessible. Ventilation of case is through large breather amidships. Cooling is by water, thermo syphon system, a neat type of cooler being used, draft forced by belt-driven fan. Lubrication is by constant level splash maintained by force feed oiler at



Side View of Empire Chassis.

Side view of chassis, showing the location of motor and transmission, center control lever, inclined steering post with 17-in. wheel. Note the encircling yoke which forms the rear support of the unit power plant. The radiator is supported on cross member of frame, fitted with supplementary tank.

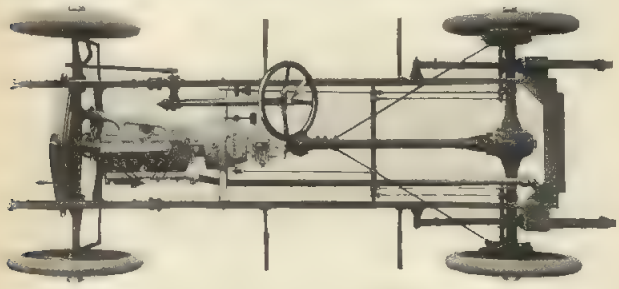
the bottom of the crank case, spiral gear driven from the cam shaft. A sight feed is located on the dash. Ignition is by high tension magneto with set spark.

Disc Clutch, Unit Power Plant, Semi-Floating Rear Axle.

A disc type of clutch is used, this housed in the fly wheel. The plates are dry and faced with raybestos.

The three speed and reverse, selective, sliding gear transmission, aluminum case, is bolted to the fly wheel housing, making a unit construction, rear support being throughout length. Reinforcement is by cross members, hot riveted to place. Heavy triangular gussets are fitted at the rear corners and the outer ends of these form the anchorage plates for the top sections of the springs. The running boards are supported by two heavy hangers riveted to the frame.

Front springs are semi-elliptic, rear three-quarter, these anchored in the usual way. The rear sets are scroll ended and the forward supporting brackets are riveted to the frame rails.



Top View of Empire Chassis.

Frame is pressed steel, upkicked over the rear axle, re-inforced by cross members, motor and transmission forming a unit supported at three points. The rear corner heavy gusset plates form the anchor plates for the top quarters of the rear springs. Gears are shifted by center ball topped hand lever and steering is from the right through worm and full gear system.

through a large yoke, the ends of which are anchored to the frame. Gears are of special steel, ⅞ in. face and bearings are annular ball. Final drive is through a propeller shaft enclosed in a steel torque tube. Truss bars extend from the rear axle tubes to the torque tube at a point directly back of the universal joint

Rear axle, semi-floating type, is Salisbury make and is fitted with roller bearings. The main housing is cast and parted vertically, the two sections bolted to place and to ensure strength heavy webs are formed integral with the case. Axle tubes are steel. Wheels are wood, artillery type, 32 in., fitted with quick detachable rims. The hub caps are aluminum and bear the car name.

Front Axle, Pressed Steel Frame and Springs.

Front axle is of conventional design, I-beam section, center dropped, spring seats and steering jaws integral. Steering cross connection is back of the axle.

Frame is pressed steel, upkicked over the rear axle, side rails otherwise straight

Body and Control.

The fore door, flush sided body, fitted with a cast dash and integral shroud is made of aluminoid steel, wood trimmed. The cushions are sufficiently slanted to ensure easy position for the occupants. All door handles are within the body, thus leaving the exterior clean and unbroken.

Control is standard, spark as noted above, being fixed. An Excelsior carburetor is used, and a 12 gal. gasoline tank is under the seat, feed by gravity. Gears are shifted by a center hand lever and the car is steered from the right through a worm and full gear system with 17 in. wheel and inclined post. Throttle lever is above the wheel.

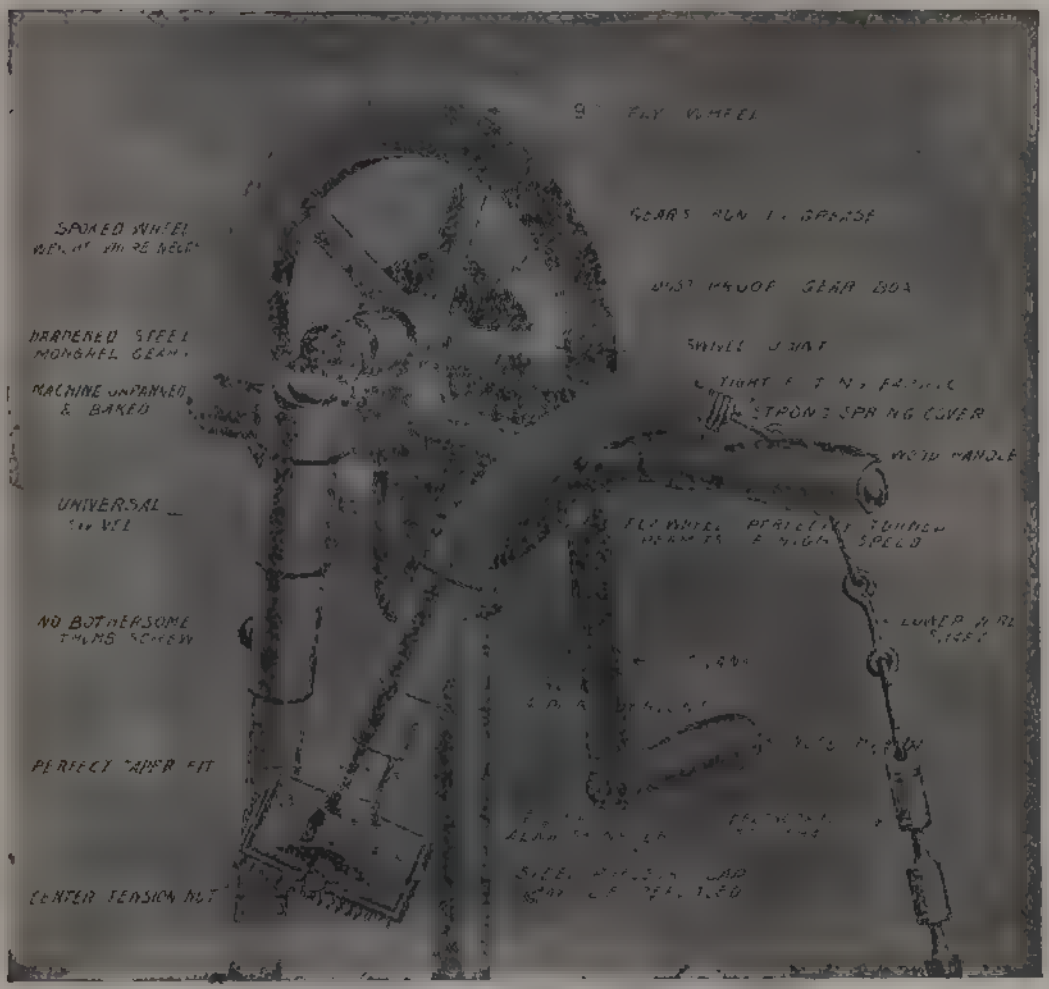
There are two sets of brakes in the rear wheels, applied by pedals, one set interconnected with the clutch pedal. Braking effort is imparted through steel pull rods, which may be adjusted.

Standard equipment includes two gas lamps, two side oil lights, oil tail light, tools, repair kit, tire pump, jack and horn. Trimming throughout is in nickel.

COATES KANGAROO POWER CLIPPERS

For Clipping Horses, Cattle and Dogs

Recommended Highly for Dairy Use



The Coates' Kangaroo Clipper is built upon the same general lines as the "Samson" The Coates' Sheep Head cannot be attached to this machine, however. It is equipped with the same Swivel Mongrel Gears, housed by a Swivel Canopy made of steel The Fly Wheel is the same, with the exception of the canopy covering the wheel It is equipped with a six foot shaft made on the wire link principle This chain is equipped with a special patented T Iscope Link, which allows the Shafting to drop down in sight at all times. The Head is very easily hooked on to the Shaft The proper Shuck exists at all times so that the shaft can be used straight or at a curvature.

Illustration Shows Swivel Mongrel Gear.

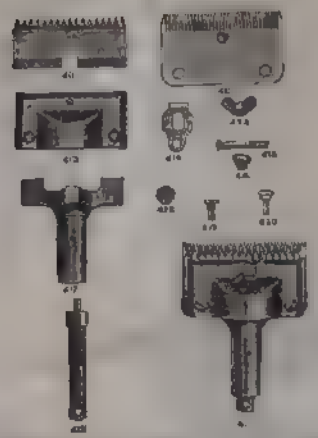
	Each
No. 40—Coates' Kangaroo Horse Clipper.....	$ 7 50

Weight 36 Lbs. Each, Boxed

For Prices on Coates' Horse Head, Repair Parts for same, and parts for the Coates' "Kangaroo" Machine, See Page No. 2845.

REPAIR PARTS

For Coates' "Samson" and "Kangaroo" Power Clippers



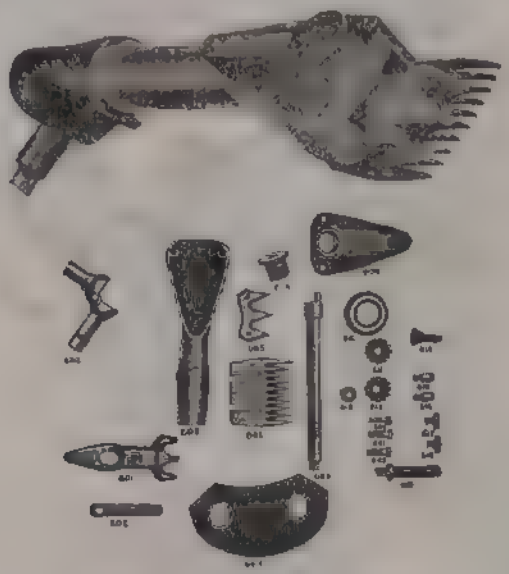
PARTS OF COATES' HORSE HEAD

For use on both Coates' "Samson" and Coates' "Kangaroo" Power Clippers

		Each			Each
No. 411	Top Plate	$1 00	No. 418	Eccentric Shaft	$0 35
No. 412	Bottom Plate	1 50	No. 419	Tension Cap Screw	05
No 413	Steel Pressure Cap	35	No 420	Eccentric Shaft Screw	10
No 414	Eccentric Shaft	20	No 421	Complete Head	3 50
No. 415	Bolt	.05	No. 422	Eccentric Roll	.10
No. 416	Tension Spring	05	No 423	Wing Nut	05
No. 417	Handle Frame	.50			

PARTS OF COATES' "KANGAROO" MACHINE

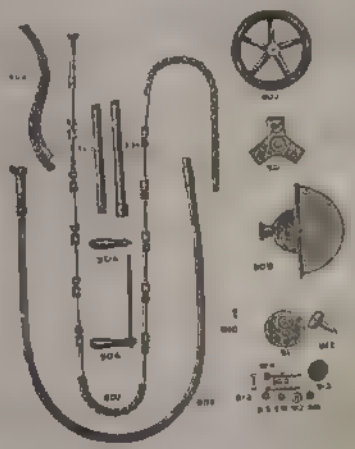
		Each			Each
No. 700	Fore Part of Upright and Cap	$0 60	No. 711	Fly Wheel Pinion	$0 60
No. 701	Second Part of Upright	40	No. 712	Swivel Joint Spindle	50
No 702	Crank and Handle	60	No. 713	Swivel Mongrel Gear	30
No 703	Fly Wheel	2 00	No 714	Nut for Crank	05
No 704	Handle and Pin	20	No 715	Washer Crank	05
No 705	Swivel Joint	1 00	No 716	Swivel Gear	30
No 706	Gear Frame	1 50	No 717	Pair Feet Chain only	30
No 707	Leg Spider	35	No 718	Flexible Cover with-out Chain, per foot	50
No 708	Frame Cap Screw	05	No 719	Gear and Pinion	2 00
No. 709	Frame Cap	.65	No. 720	Drive Gear and Spindle	1 50
No 710	Spider Bolt	06	No. 721	Leg	.35



PARTS OF COATES' SHEEP HEAD

For use on Coates' "Samson" Power Clipper only

		Each			Each
No. 600	Joint Frame	$1 00	No. 612	Joint Cog	$0 30
No 601	Plate Fork	1 50	No 613	Eccentric Roll	20
No. 602	Nut Spring	10	No 614	Wiggle Bar	25
No. 603	Shell	1 00	No 615	Joint Rivet	05
No. 604	Nut	25	No 616	Joint Washer	05
No 605	Top Plate	15	No 617	Comb Screw	10
No 606	Bottom Plate	50	No 618	Comb Screw	10
No 607	Leather Guard	25	No 619	Joint Spindle	25
No 608	Eccentric Shaft	50	No. 620	Spring Screw	05
No. 609	Shell Cap	30	No 621	Cap Screw	05
No 610	Ferrule	05	No 622	Cap Screw	05
No. 611	Joint Cog	30	No. 623	Complete Head	4 50



PARTS OF COATES' "SAMSON" MACHINE

		Each			Each
No 900	Fly Wheel	$2 00	No 911	Frame Cap	$0 60
No 901	Spider	35	No 912	Drive Gear and Spindle	1 50
No 902	Leg	35	No. 913	Spider Bolt	60
No 903	Upper Upright	40	No 914	Pinion	00
No. 904	Lower Upright	60	No 915	Mongrel Cog	30
No. 905	Handle	20	No 916	Nut for Crank	05
No. 906	Crank	50	No 917	Washer	05
No 907	Shaft Unit	20	No. 918	Mongrel Cog	.30
No 908	Cover, per foot	50	No. 919	Gear and Pinion	2.00
No 909	Frame	2 05	No. 920	Joint Spindle	.50
No 910	Frame Screw	.05			

MISCELLANEOUS CHARGES FOR PARTS AND GRINDING

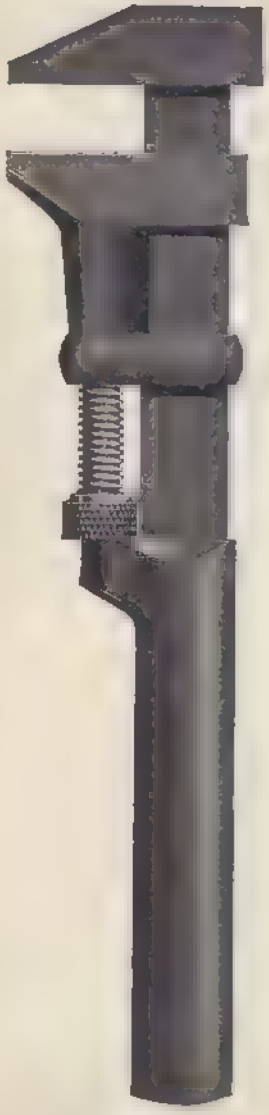
Grinding All Kinds of Horse Clipper Knives, per Set	$ 0 50	Oil, per Gallon	$1.00
Grinding Sheep Shearing Knives, Each	10	Flexible Shaft Compound, per Tin	20
Flexible Shaft complete, per ft. (wire link)	.75	Grinder Paste, per Box	10
Oil, per Quart	.50	End Flexible Shaft Hook, Each	75
		Flexible Shaft, per Unit	20
		Universal Extension Rod, Each	$0 30
		Square for Extension Rod, Each	20
		Unit retaining Rings, per Dozen	.10
		Flexible Cover, per Foot	50

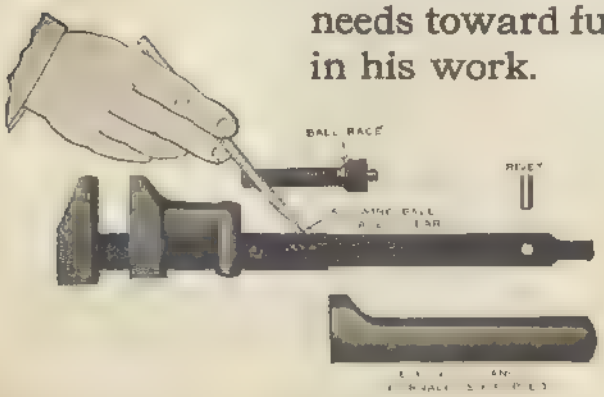
No One Ever "Kno

THE wrench buyer goes into a store and buys a wrench that's "just as good"—but—it's cheaper.

And the fact that "it's cheaper" tells the story in a nut-shell. Inferior quality invariably goes with the cheaper price.

You can't sell a "Coes" Wrench in competition with "junk" wrenches and make a profit on it. If you want your profit, then you've got to ask 5% more for the "Coes" than you'd ask for the "just as good" kind. That 5% extra is all that you're asking for 30% greater strength, and that 30% greater strength gives the "Coes" Wrench user all that he expects and needs toward full efficiency in his work.





Coes Wrench Company,

Agents: J. C. McCarty & Co., 21 Murray St., New York

cks" a Dead One

YOU'LL always satisfy the man to whom you give his money's worth. His memory is good, and he'll come back for "more of the same."

If you're not already a "Coes" convert, get a few "Coes" Wrenches and try them out on the knowing ones. Sell them where you've been selling other wrenches, and 'twill give you an excellent idea of how much better and easier it is in the long run to hold a steady trade in your hands with good prices piled around it.

With your next wrench order to your jobber, all you need to remember is "Coes."

Worcester, Mass., U.S.A.

John H. Graham & Co., 113 Chambers St., New York

FIRE-PROOF SAFES

Entire Page, F. O. B. Cincinnati, Ohio

When adjusting a loss the insurance companies ask for the account books, insurance policies and last inventory. These records would be secure from all danger, in one of these safes. It would pay if you had nothing to put in but the day's sales and the insurance policy. Same construction as Safes on opposite page, but having Cash Box or Sub-treasury, instead of Burglar Proof Chest.

Outer and inner boxes are of wrought steel, the outside is one continuous wrought steel plate, bent to form top, sides and bottom; attached to heavy angle frames, making all corners round and a perfectly smooth surface, no panels.

The space between boxes is filled with concrete cement, in semi-liquid state; it permeates every crevice, then hardens into one solid mass.

There is no corrosion or dampness, but when heated by fire, the concrete generates a vapor, filling every pore and forming a cool, moist wall around the contents.

Doors are stepped and flanged, secured by front and back bolts; non-pickable combination lock, with T handle on bolt work of outside door (key-lock if preferred); cylinder key lock on inside doors.

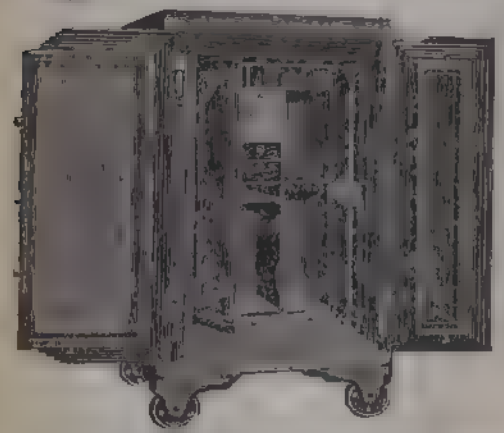
Finished in black with handsome decorations; customer's name lettered on case, free of charge.

SINGLE OUTSIDE DOOR, with Cash Box

Nos.	Each	Weight Lbs.	Outside Measure, In. High	Wide	Deep	Inside Measure, In. High	Wide	Deep	Drawers	Pigeon Holes	Book Spaces
344A	$40.00	225	22	15	16	11½	9	8½	1	1	1
344B	46.00	350	26	16	17	15	9	10	1	1	1
344C	58.00	500	30	18½	18	15	10	10	1	2	1
344D	75.00	750	32	22½	22½	18	14	12½	1	2	1

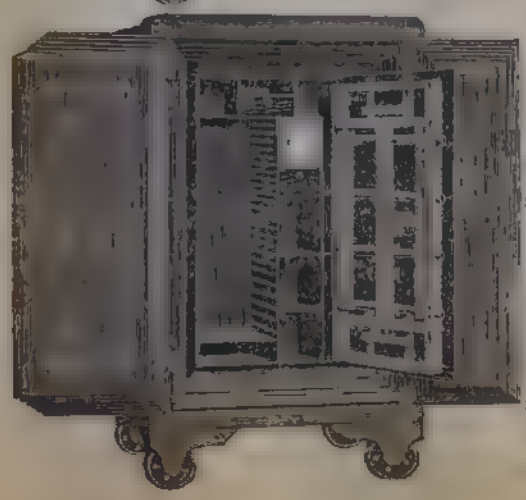
SINGLE DOORS, Outside and Inside, with Cash Box

Nos.	Each	Weight Lbs.	Outside Measure, In. High	Wide	Deep	Inside Measure, In. High	Wide	Deep	Drawers	Pigeon Holes	Book Spaces
344E	$55.00	400	28	15	17	15	9	10	1	1	1
344F	65.00	525	29	18½	18	15	10	10	1	3	1
344H	82.00	800	32	22½	22½	18	14	12½	1	3	1
344K	100.00	1000	37½	25	25½	22½	16½	13½	1	3	2
344L	120.00	1250	41	27	26	26	18	14	1	4	2
344M	160.00	1700	45½	31	28	25½	18½	13	2	2	3
344N	180.00	2000	47½	31½	28	27½	19½	13	2	4	3
344P	200.00	2150	50½	32½	29	29½	20½	14	2	4	3
344R	170.00	1900	50	31	28½	30	20	14½	2	6	3
344S	215.00	2300	52	33½	29	31½	21½	14	2	7	3



DOUBLE DOORS, Outside and Inside, with Cash Box

Nos.	Each	Weight Lbs.	Outside Measure, In. High	Wide	Deep	Inside Measure, In. High	Wide	Deep	Drawers	Pigeon Holes	Book Spaces
344AA	$270.00	2500	51	37	30	30	26	15	3	7	3
344BB	310.00	3000	55	40½	30	34	28	15	3	10	6
344CC	350.00	3400	68	38	30	48½	28½	15	3	12	5
344DD	340.00	3300	60½	36½	30	39½	23½	15	2	5	6
344EE	370.00	3850	64½	42	31	43½	29½	16	4	11	5
344FF	380.00	4000	61½	45½	31	39½	31½	16½	2	13	6
344HH	550.00	5600	72½	63½	32	50	40	17	4	25	9
344KK	700.00	6800	82	62	32	56	45	17	6	18	11



DOUBLE DOORS, Outside and Inside, with Cash Box

Steel Lined Inside with two ¼ In. Plates

For Jewelers and those having bulky valuables; for Notes and Collateral of Banks; door and frame being felt packed to keep out explosives, these safes offer the highest form of protection against robbery or fire; Steel Inside Chests and Time Locks may be added.

Burglar Proof Inside Doors, both sets have combination locks, with detachable dials and built in spindles closing with pressure bars. The outside door is made of four ⅛ in. plates, two of drill-proof and two of Bessemer Steel; cabinets are usually made to order, otherwise the regular inside arrangement, as shown herewith, is used.

Nos.	Each	Weight Lbs.	Outside Measure, In. High	Wide	Deep	Inside Measure, In. High	Wide	Deep
344LL	$730.00	3625	50½	38½	29	30	26	14½
344MM	800.00	4450	54½	40½	32	34	28	15
344NN	1000.00	6100	70½	41½	33½	48	28	16½
344PP	830.00	4550	51½	36½	32	39½	23½	15½
344RR	870.00	5225	65½	39½	32½	43½	26½	15½
344SS	920.00	5300	61½	45½	33	39½	31½	16½
344TT	1175.00	6500	73½	43½	33½	52	30	16
344WW	1700.00	9500	82	62	34	56	45	16

All Above are sold for Prompt Shipment from Factory

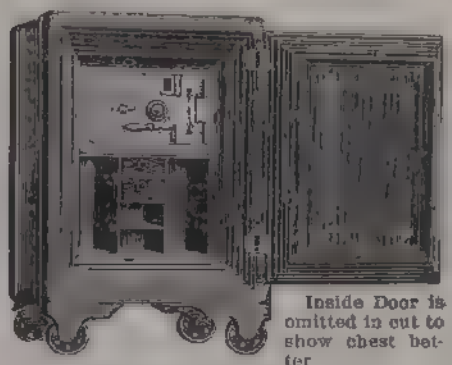
BURGLAR AND FIRE-PROOF SAFES

Entire page, F. O. B. Cincinnati, Ohio

Outer and inner boxes are constructed of wrought steel, the outside is one continuous wrought steel plate, bent to form top, sides and bottom, attached to heavy angle frames, making all corners round and a perfectly smooth surface, without panels. The space between boxes is filled with concrete cement, in semi-liquid state it permeates every crevice then hardens into one solid mass. There is no corrosion or dampness, but when heated by fire the concrete generates a vapor which fills every pore and forms a cool, moist wall around the contents. Doors are stepped and flanged, secured by front and back bolts, non-pickable combination lock on outside door with T handle for bolt work (key lock if preferred), cylinder key lock on inside doors. Finished in black with handsome decorations, customer's name lettered on case, free.

With Inside Doors and Burglar Proof Chest

[illegible] chests all angle bars 2x2 in., 5 ply welded iron and steel plates, twisted iron and steel screws, calendered steel bolts. Bolt holes in plates are ground true, for perfect fit, the walls are built from outside inward, no screw heads showing outside, door is 4 [illegible] thick in all, solid of alternate iron and steel plates, has crane hinges and closes with pressure bar. Combination Lock of 4 tumblers.



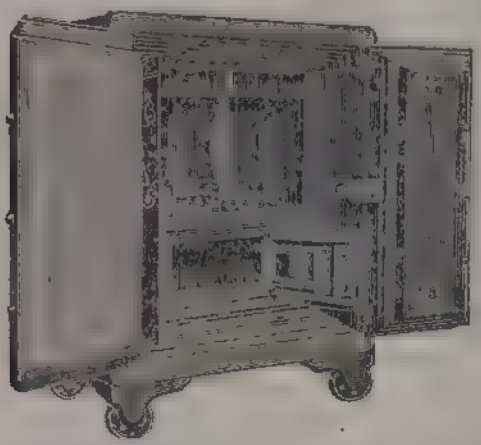
Inside Door is omitted in cut to show chest better

SINGLE DOOR, Outside and Inside

The Inside Door does not show in cut, having been left out, the better to show the chest

Nos.	Each	Weight Lbs.	Outside Meas., In. High	Wide	Deep	Inside Meas., In. High	Wide	Deep	Chest—Outside, In. High	Wide	Deep
345C	$300.00	1500	37½	25	26	22½	16½	14⅛	14	16½	12
345D	320.00	1700	41	27	28	26	18	14	14	16½	12
345F	370.00	2200	45½	31	30	25½	18½	15½	14	16½	12
345H	380.00	2500	47¼	31¾	[illegible]	27 [illegible]	19½	15½	14	16½	12
345K	400.00	2650	50¼	32¾	30	29¼	20⅛	15½	14	16½	12
345L	415.00	2800	52	33¾	30	31½	21½	15½	14	16½	12

The first size has two drawers and two shelves; the others have two drawers, two pigeon holes and two book spaces.



DOUBLE DOOR, both Outside and Inside

Nos.	Each	Weight, Lbs.	Outside Meas., In. High	Wide	Deep	Inside Meas., In. High	Wide	Deep	Chest—Outside, In. High	Wide	Deep	Drawers	Pigeon Holes	Book Spaces
345M	$490.00	3000	51	37	30½	30	26	16¾	14	26	13¼	2	4	2
345N	530.00	3700	55	40½	31½	34	28	16¾	14	26	13¼	2	4	2
345P	570.00	4000	68	38	31	48	26	16¾	14	26	13¼	3	16	3
345R	560.00	3900	60¾	36½	31½	39½	23⅜	16¾	14	16½	13¼	2	5	3
345S	590.00	4400	64	42	31	43	29½	16¾	14	26	13¼	2	18	3
345T	600.00	4500	62	45½	32	39½	31½	17	14	26	13¼	2	7	4
345V	1000.00	6800	72⅛	53½	34	60	40	18	17	40	15	5	20	4
345W	1150.00	8000	82	62	35	58	46	19	17	40	15	6	21	7

All Above are Sold for Prompt Shipment from Factory

FIRE-PROOF VAULT DOORS

Every office keeping a large number of records, account books, valuable papers, etc., should have a Fire-Proof Vault.

Business ethics require it and the insurance companies demand such protection.

With these Vault Doors, a fire-proof vault can be built for less money than a large safe would cost and give more storage room than twenty such.

Build on a solid stone foundation, walls four bricks thick with 1 in. air space down the center; make a crown or arched roof, stayed with Roof Bolts about every two feet; these would prevent caving of vault if walls were to fall on it. The Door Opening in wall should be 79 in. high, 32 in. wide by 20 in. thick.

Door Construction—Heavy angle bars panel the outside door and form bolt case; there are 4 cross and 1 up and down bolts, of 1 in. cold drawn steel on the outer; and up and down flat bolts on the inner doors. The opening in door frame is 76x28x20 in. deep; doors are hung on two heavy hinges; with combination lock outside and flat key lock inside; Handsomely Decorated. Purchaser's name lettered free of charge. Larger or Smaller Sizes can be Built to Order.

Each

No. 345X—(2) Outside Door ⅞ in. Steel Plate, Border 2x2x⅞ in. Angle Steel; Door Frame 3x⅞ in.; Inside Doors of No. 16 Steel with 2x⅞ in. Panels; Vestibule of No. 16 Steel with 1⅛x1½x⅞ in. Supporting Angles; Weight 550 Lbs..... $130.00

No. 345Y—(6) Same Size as Above, but Heavier and with Ornamental Molding; Outside Door of ¼ in. Steel Plate, Border 2x2x¼ in. Angle Steel, Door Frame 3x¼ in.; Inside Doors of No. 14 Steel with 2x⅞ in. Panels; Vestibule of No. 14 Steel, with 1½x1½x¼ in. Supporting Angles; Weight 750 Lbs..... 210.00

Above are Sold for Direct Shipment from Factory

MARBLE'S GAME GETTER GUN

Upper barrel is .22 caliber, rifled. Lower barrel is .44 caliber smooth bored for shot or round ball. Weight about 35 ounces. Holster furnished free.

Ammunition for Game Getter Guns

This one gun shoots .22 short, long and L. R., .44 shot and .44 round bullet.
Will shoot C. B. caps, but do not use unless loaded with black powder.
Gun is opened by pulling backward on front of trigger guard. Cannot be "broke" accidentally. Stock adjustable.

SPECIFICATIONS

Barrels, round fluted. Frame, drop forged blued. Trigger, single. Grips, rubber. Stock, steel tubing nickeled. Holster, finest case leather, brown or black.

***No. B12.**	12 in. barrels, lock leaf sight, "Gold" bead sight and holster	each, $15.00
No. B15.	15 in. barrels, lock leaf sight, "Gold" bead sight and holster	each, 16.00
***No. B18.**	18 in. barrels, lock leaf sight, "Gold" bead sight and holster	each, 17.00
***No. A12.**	12 in. barrels, flexible rear sight, lock leaf sight, "Gold" bead sight and holster	each, 18.00
No. A15.	15 in. barrels, flexible rear sight, lock leaf sight, "Gold" bead sight and holster	each, 19.00
***No. A18.**	18 in. barrels, flexible rear sight, lock leaf sight, "Gold" bead sight and holster	each, 20.00

*Not carried in stock but can be furnished by shipment direct from factory.

MARBLE'S SAFETY POCKET AXES

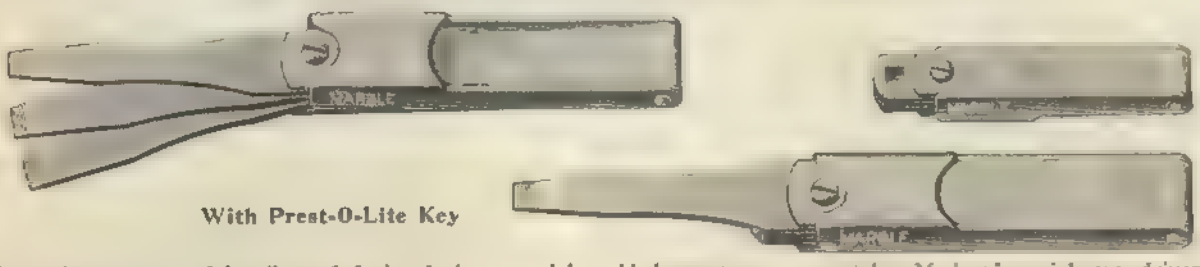
No. 2 **No. 3**

The blades are made of tool steel, are truly tempered, are sharpened. The metal handles are drop forged and will never break. Soft pleasure grip rubber. The metal guard springs hinged with the metal and folds out over the handle.

No. 2.	Steel handle, solid steel blade, weight 21 ozs., length 11 in.	each, $2.50
No. 3.	Steel handle, solid steel blade, weight 27 ozs., length 12 in.	each, 3.00

Two only in a box

MARBLE'S POCKET SCREW DRIVERS



With Prest-O-Lite Key

Flat and compact steel handle, nickel plated, three good long blades that open separately. Made of special screwdriver steel.

No. 245.	Size, open, 4½ in., closed, 3 in.	per dozen, $6.00
No. 246.	Size, open, 5¼ in., closed 3½ in.	per dozen, 6.00

*Not carried in stock.

MARBLE'S SPECIALTIES

IDEAL HUNTING KNIFE

Blade is adapted to sticking and skinning. Oval ground at back of point for chopping bone. Handles are stag slabs or leather discs with discs of red and black fibre and brass, driven on the strong tangs and held by stag tip and flush nut.

No. 41. Leather handle, 5 in. blade each $2.25

No. 41. Leather handle, 6 in. blade, each..... 2.50

Prices include a tube sheath as illustrated below.

TUBE SHEATHS

No. 34. Extra tube sheaths, each.....$0.50

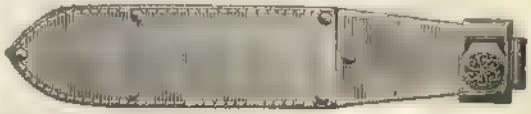
SAFETY FISH KNIVES

Folded

The blade is made sharp at back of point for ripping and the back is an excellent fish scaler. German silver handle.

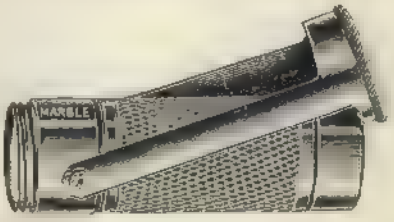
No. 78. Blade 4 in., weight 3½ ozs., each.....$1.25

HILT KNIFE SHEATHS



No. 39. Hilt knife sheaths each. $0 50

WATERPROOF MATCH BOXES



Made of seamless drawn brass, heavily nickel plated, is the size of a 10 gauge shell. There is a rubber gasket in the cover, absolutely water and moisture proof.

***No. 81.** Marble's waterproof match boxes . . . .

Again, after ignition and during the working stroke, the piston intake ports are closed against working stroke pressure only by the fit of the piston in the cylinder, no packing rings being shown to stop the escape of the burning charge.

To answer 775 categorically, no engine similar to his design has been previously invented or patented, either one, and the chief objection to the design shown is that a motor constructed in accordance therewith would not run at all.—H. D.

Two-Diameter Piston

[777] In the September, 1911 issue concerning a two diameter piston, two-cycle motor, to make the third port by drilling ¼ in. holes at bottom of cylinder for intake. On the up stroke of piston would that leave holes exposed to crank case and consequently draw a charge in base and on down stroke blow back in carburetor

2. How did you mean to fasten pipe to cylinder to said ¼ in. holes?

3. In using automatic intake valve on two diameter cylinder in head, would not the pumping piston force charge in firing chamber as the pressure increased by the up stroke of pumping piston until pressure was equal in both the pumping and firing cylinder?

4. What would be the proper length for compression in a 3 in. bore by 3⅜ in. stroke, two diameter piston and automatic intake valve in head of cylinder?

5. Would a valve in head of piston and port cored through piston to charging cylinder be as good as valve in head of cylinder?

ROLLIN A. RICHMOND.

SPRINGFIELD, MASS.

As to proposed 2-cycle, 2-cylinder, 2-diameter piston cycle motor, page 118, Journal Sept. 1, 1911, the ¼ diameter charge intake holes open to the large diameter piston cylinder when the piston is at bottom of stroke, these holes opening into a ring passage piped to the carburetor, and the large diameter port of the piston must be long enough to cover these ¼ diameter holes when the piston is at top of stroke. The ¼ in. holes make a third port for the large diameter cylinder, and the charge sucked into the large diameter cylinder is compressed by the piston up stroke, so as to be ready for charging the other working cylinder soon after its exhaust port is opened by descent of the other piston in its working stroke.

Since the piston large diameter is made long enough to cover these ¼ in. diameter intake holes when the piston is all the way up, it is obvious that nothing can pass through these ¼ in. holes into the crank-box. The object sought by introducing the two-diameter piston is to avoid admission of combustible mixture to the crank box and the establishment of pressure in the crank box. Of course, like all third port motors, this arrangement would force the displacement volume of the large diameter piston ¼ in. travel back into the carburetor at low speeds, but not at high speeds, when the inertia of the volume of mixture in the passage to the carburetor would resist the travel of this piston displacement volume back to the carburetor.

If the large diameter piston were made so short as to open the ¼ in. diameter holes to the crank box when the piston was at the top end of the stroke, then of course this would give a third port opening into the crank box, and mixture so drawn into the crank-box would be driven back into the passage to carburetor until the descending large diameter piston closed the ¼ in. diameter intake holes.

2. If the ¼ in. holes were in a ring entirely around the cylinder, then the carburetor pipe would be formed in a complete ring passage bored to fit the cylinder body.

3. The automatic intake valve at top of working cylinder would be held up against its seat by the burning charge pressure until the working piston uncovered the exhaust port near the end of the working stroke, forming a partial vacuum in this working cylinder which is supplied by the compressed charge entering the cylinder through the automatic intake valve as soon as the cylinder pressure falls below the charge compression pressure.

4. For 3⅜ in. stroke, ⅝ in. length of compression space would give about average compression. ½ in. would give higher compression, of course.

5. Valves in the piston have been tried with crank box pressure 2-cycle motors with some degree of success..

Malcolm told the writer that he had made extended experiments with an intake valve in the piston head and had formed an unfavorable opinion of this piston head intake valve.

In the writer's opinion the piston head valve is not the best, and, as will readily be seen, the piston head intake valve is available only when crank box pressure is used.—H. D.

KINKS

Every car owner should study lubrication and determine how much oil his car requires for every mile it is run; then to see to it that neither too much nor too little lubricant is used.

Do not neglect to clean the dust pan under the engine. It is very likely to contain an accumulation of gasoline which is very readily ignited, and therefore a constant source of danger from fire.

To make paint stay on brass parts which become heated because of their proximity to the engine, the brass should be first given a priming coat of shellac. This acts as a foundation for the paint and is proof against peeling.

"If one would start his motor on the spark he should speed his motor up, just before stopping it, by opening the throttle wide," says Charles Spiltdorf, who has been in the business long enough to know what he is talking about. "Then if the spark is cut off a full charge is left in the cylinder, to be ignited when another start is to be made."

The best way to remove tar from the body of a car is with linseed oil. Rub lightly on with a stiff rag and leave on till the tar is softened, then polish off with clean soft rag till all the oil and tar are removed; always rubbing in one direction. If the tar is very thickly coated on, then ordinary oil is the best to begin with, and finish off with linseed. When the car is looking dull and scratched, go over it with linseed oil, then polish up lightly.

Locating squeaks about the machine is one of the favorite pastimes of automobile passengers who are helpfully inclined. At times experiment reveals the fact that a noise which has been particularly annoying is stopped when one of the tonneau doors is opened. The explanation is that a slight amount of "working" takes place between the door and its framework. This may be occasioned by a general loosening up of the body frame, or merely by a slight sagging of the centre where it is apt to be weak. If this happens to be the case a simple, though by no means permanent remedy, is to put one or more leather washers over the retaining bolts in the centre of the body, thus bolstering it up at the sagged point.

Books on Overhauling

[1424] Will you please give me the prices and publishers of books containing information on the overhauling of the motor car, including information on magnetos, clutches, valves, transmissions, timing of valves, and setting of timer on magneto?

Can you tell me whether the Ideal Valve Grinder Outfit sold by Beckley-Ralston Company, of Chicago, Ill., has an attachment for grinding valves on Ford cars?

FREELAND, PA. JAS. E. GRIFFITH, JR.

We have written by mail, giving names of some books that may serve your purpose. There are a number of books on the subject but probably Homans' "Self Propelled Vehicles," Brooks' Automobile Hand Book, or Robert's Hand Book are as good as any. You will get a great amount of information by reading the mechanical descriptions in our columns.

The Ideal Valve Grinder is equipped with a screw driver tool and several tools with pins at varying distance, the combination allowing it to fit almost any valve in any car on the market. This device was described in our December, 1911, issue and an interior view was published in February, 1912.—C. E. D.

Too Many Drivers

[1419] We have four chauffeurs, two of whom are unusually good mechanics, one with fifteen, the other with nine years experience. The auto used occasionally by all is often out of order. One claims it is best to run on advanced spark, another claims this method injures the machinery and claims that it is best to run on retarded spark.

PEEKSKILL, N. Y. C. W. M.

"Too many cooks spoil the broth," and it is almost impossible to keep a machine in order with several men attending to it. Even with the best intentions, they differ as to what should be done, and when it should be done, so there will always be some conflict.

The spark should be kept as far advanced as the speed of the engine will permit. There is nothing gained by firing the charge late, but on the contrary, it is less economical and heats the engine more. If the fuel energy can be converted into pressure at the beginning of the stroke, it heats the engine less and develops more power, so that smaller charges and less fuel may be used for given work. My two-cycle practice is to largely set the spark ahead and not change it, or, in other words, to use a starting position and a running position for the spark.—C. E. D.

Ether in Gasoline

[1422] I would like you to give me a little information. What is your opinion about putting ether in with gasoline? Will not this give it a higher explosive force, and if so, how much should be used with 15 gals.? Will it injure the metal parts of an engine?

NEW BRUNSWICK, N. J. A. VOORHEES.

Ether is a rather expensive fuel, but even a little of it makes the engine start more easily, because it vaporizes at a very low temperature. We do not think it has any tendency to injure the metal. We have used it for priming and generally put an ounce or two with a gallon of gasoline. It costs here about 35c a lb., so it is approximately fifteen times as expensive as gasoline.—C. E. D.

Two-Cycle Engines

HUGH DOLNAR

The Miller Two-Cycle Motor

[775] A,A, intake ports, may be full circle around the cylinder.

B,B, exhaust ports, may be full circle around the cylinder.

C,C, sleeve, or integral downward extension of piston.

E,E, cylinder head packing rings.

Motor Operation.

The operation of this motor is very simple. The charge enters the cylinder at the bottom parts, A,A, full circle around the cylinder, being forced upward by crank-box compression. The exhaust ports, B,B, full circle around the cylinder, must, of course, be open same time that intake ports are open to take the charge in. The piston is shown in the figure as near the bottom of the stroke, and the crank shaft may run in either direction. As the piston rises in its up stroke, the top of the piston moves upward in an annular space in the cylinder head, the lower end of this head annulus being fitted with packing rings, E,E, and this upward movement of the piston first closes the intake ports, A,A, and soon after closing the intake ports, the piston upward motion closes the exhaust ports, B,B, same as in an ordinary 2-cycle motor, and upon closing of the exhaust ports, compression of charge begins between the stationary cylinder head inside the piston and the upwardly moving piston bulkhead, and sometime, just before the piston reaches the top of its travel the charge is fired. In the working stroke the piston travels downward, the charge burning, not in the cylinder in the usual manner, but in the upper part of the sleeve piston, the piston being driven downward by pressure on the piston bulkhead, the burning charge exhausting through the exhaust ports, B,B, which must be, in the usual 2-cycle manner, opened before the intake ports A,A, are uncovered to take in a fresh charge.

775 asks, "Has such an engine ever been invented? If so, what objection to it, if any? I have no patent on same—do you think I could obtain one?"

In reply, it would seem that 775 intends to omit the cylinder entirely, at least in its usual position, and to replace the cylinder with a ring shaped cavity in the cylinder head, or, possibly, with a stationary inverted cylinder having a closed head at the bottom and provided with exterior packing rings at its bottom end to fit the internal surface of the sleeve piston. Such a construction evidently would not do at all, because, without cylinder walls to cover the intake ports cut through the piston wall just above the piston bulkhead, the charge would be forced out of the hollow piston during the compression stroke, into the open air.

775 neither shows nor specifies any third port mixture admission to the crank-box, though direction arrows indicate charge motion from the crank box to the piston interior. Of course, a third port could be opened into the crank box, to be uncovered by the bottom end of the piston at top end of piston stroke.

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FREELAND, PA. JAS. E. GRIFFITH, JR.

We have written by mail, giving names of some books that may serve your purpose. There are a number of books on the subject but probably Homans' "Self Propelled Vehicles," Brooks' Automobile Hand Book, or Robert's Hand Book are as good as any. You will get a great amount of information by reading the mechanical descriptions in our columns.

The Ideal Valve Grinder is equipped with a screw driver tool and several tools with pins at varying distance, the combination allowing it to fit almost any valve in any car on the market. This device was described in our December, 1911, issue and an interior view was published in February, 1912.—C. E. D.

Too Many Drivers

[1419] We have four chauffeurs, two of whom are unusually good mechanics, one with fifteen, the other with nine years experience. The auto used occasionally by all is often out of order. One claims it is best to run on advanced spark, another claims this method injures the machinery and claims that it is best to run on retarded spark.

PEEKSKILL, N. Y. C. W. M.

"Too many cooks spoil the broth," and it is almost impossible to keep a machine in order with several men attending to it. Even with the best intentions, they differ as to what should be done, and when it should be done, so there will always be some conflict.

The spark should be kept as far advanced as the speed of the engine will permit. There is nothing gained by firing the charge late, but on the contrary, it is less economical and heats the engine more. If the fuel energy can be converted into pressure at the beginning of the stroke, it heats the engine less and develops more power, so that smaller charges and less fuel may be used for given work. My two-cycle practice is to largely set the spark ahead and not change it, or, in other words, to use a starting position and a running position for the spark.—C. E. D.

Ether in Gasoline

[1422] I would like you to give me a little information. What is your opinion about putting ether in with gasoline? Will not this give it a higher explosive force, and if so, how much should be used with 15 gals.? Will it injure the metal parts of an engine?

NEW BRUNSWICK, N. J. A. VOORHEES.

Ether is a rather expensive fuel, but even a little of it makes the engine start more easily, because it vaporizes at a very low temperature. We do not think it has any tendency to injure the metal. We have used it for priming and generally put an ounce or two with a gallon of gasoline. It costs here about 35c a lb., so it is approximately fifteen times as expensive as gasoline.—C. E. D.

Two-Cycle Engines

HUGH DOLNAR

The Miller Two-Cycle Motor

[775] A,A, intake ports, may be full circle around the cylinder.

B,B, exhaust ports, may be full circle around the cylinder.

C,C, sleeve, or integral downward extension of piston.

E,E, cylinder head packing rings.

Motor Operation.

The operation of this motor is very simple. The charge enters the cylinder at the bottom parts, A,A, full circle around the cylinder, being forced upward by crank-box compression. The exhaust ports, B,B, full circle around the cylinder, must, of course, be open same time that intake ports are open to take the charge in. The piston is shown in the figure as near the bottom of the stroke, and the crank shaft may run in either direction. As the piston rises in its up stroke, the top of the piston moves upward in an annular space in the cylinder head, the lower end of this head annulus being fitted with packing rings, E,E, and this upward movement of the piston first closes the intake ports, A,A, and soon after closing the intake ports, the piston upward motion closes the exhaust ports, B,B, same as in an ordinary 2-cycle motor, and upon closing of the exhaust ports, compression of charge begins between the stationary cylinder head inside the piston and the upwardly moving piston bulkhead, and sometime, just before the piston reaches the top of its travel the charge is fired. In the working stroke the piston travels downward, the charge burning, not in the cylinder in the usual manner, but in the upper part of the sleeve piston, the piston being driven downward by pressure on the piston bulkhead, the burning charge exhausting through the exhaust ports, B,B, which must be, in the usual 2-cycle manner, opened before the intake ports A,A, are uncovered to take in a fresh charge.

775 asks, "Has such an engine ever been invented? If so, what objection to it, if any? I have no patent on same—do you think I could obtain one?"

In reply, it would seem that 775 intends to omit the cylinder entirely, at least in its usual position, and to replace the cylinder with a ring shaped cavity in the cylinder head, or, possibly, with a stationary inverted cylinder having a closed head at the bottom and provided with exterior packing rings at its bottom end to fit the internal surface of the sleeve piston. Such a construction evidently would not do at all, because, without cylinder walls to cover the intake ports cut through the piston wall just above the piston bulkhead, the charge would be forced out of the hollow piston during the compression stroke, into the open air.

775 neither shows nor specifies any third port mixture admission to the crank-box, though direction arrows indicate charge motion from the crank box to the piston interior. Of course, a third port could be opened into the crank box, to be uncovered by the bottom end of the piston at top end of piston stroke.

Again, after ignition and during the working stroke, the piston intake ports are closed against working stroke pressure only by the fit of the piston in the cylinder, no packing rings being shown to stop the escape of the burning charge.

To answer 775 categorically, no engine similar to his design has been previously invented or patented, either one, and the chief objection to the design shown is that a motor constructed in accordance therewith would not run at all.—H. D.

Two-Diameter Piston

[777] In the September, 1911 issue concerning a two diameter piston, two-cycle motor, to make the third port by drilling ¼ in. holes at bottom of cylinder for intake. On the up stroke of piston would that leave holes exposed to crank case and consequently draw a charge in base and on down stroke blow back in carburetor

2. How did you mean to fasten pipe to cylinder to said ¼ in. holes?

3. In using automatic intake valve on two diameter cylinder in head, would not the pumping piston force charge in firing chamber as the pressure increased by the up stroke of pumping piston until pressure was equal in both the pumping and firing cylinder?

4. What would be the proper length for compression in a 3 in. bore by 3⅜ in. stroke, two diameter piston and automatic intake valve in head of cylinder?

5. Would a valve in head of piston and port cored through piston to charging cylinder be as good as valve in head of cylinder?

ROLLIN A. RICHMOND.

SPRINGFIELD, MASS.

As to proposed 2-cycle, 2-cylinder, 2-diameter piston cycle motor, page 118, Journal Sept. 1, 1911, the ¼ diameter charge intake holes open to the large diameter piston cylinder when the piston is at bottom of stroke, these holes opening into a ring passage piped to the carburetor, and the large diameter port of the piston must be long enough to cover these ¼ diameter holes when the piston is at top of stroke. The ¼ in. holes make a third port for the large diameter cylinder, and the charge sucked into the large diameter cylinder is compressed by the piston up stroke, so as to be ready for charging the other working cylinder soon after its exhaust port is opened by descent of the other piston in its working stroke.

Since the piston large diameter is made long enough to cover these ¼ in. diameter intake holes when the piston is all the way up, it is obvious that nothing can pass through these ¼ in. holes into the crank-box. The object sought by introducing the two-diameter piston is to avoid admission of combustible mixture to the crank box and the establishment of pressure in the crank box. Of course, like all third port motors, this arrangement would force the displacement volume of the large diameter piston ¼ in. travel back into the carburetor at low speeds, but not at high speeds, when the inertia of the volume of mixture in the passage to the carburetor would resist the travel of this piston displacement volume back to the carburetor.

If the large diameter piston were made so short as to open the ¼ in. diameter holes to the crank box when the piston was at the top end of the stroke, then of course this would give a third port opening into the crank box, and mixture so drawn into the crank-box would be driven back into the passage to carburetor until the descending large diameter piston closed the ¼ in. diameter intake holes.

2. If the ¼ in. holes were in a ring entirely around the cylinder, then the carburetor pipe would be formed in a complete ring passage bored to fit the cylinder body.

3. The automatic intake valve at top of working cylinder would be held up against its seat by the burning charge pressure until the working piston uncovered the exhaust port near the end of the working stroke, forming a partial vacuum in this working cylinder which is supplied by the compressed charge entering the cylinder through the automatic intake valve as soon as the cylinder pressure falls below the charge compression pressure.

4. For 3⅜ in. stroke, ⅝ in. length of compression space would give about average compression. ½ in. would give higher compression, of course.

5. Valves in the piston have been tried with crank box pressure 2-cycle motors with some degree of success..

Malcolm told the writer that he had made extended experiments with an intake valve in the piston head and had formed an unfavorable opinion of this piston head intake valve.

In the writer's opinion the piston head valve is not the best, and, as will readily be seen, the piston head intake valve is available only when crank box pressure is used.—H. D.

KINKS

Every car owner should study lubrication and determine how much oil his car requires for every mile it is run; then to see to it that neither too much nor too little lubricant is used.

Do not neglect to clean the dust pan under the engine. It is very likely to contain an accumulation of gasoline which is very readily ignited, and therefore a constant source of danger from fire.

To make paint stay on brass parts which become heated because of their proximity to the engine, the brass should be first given a priming coat of shellac. This acts as a foundation for the paint and is proof against peeling.

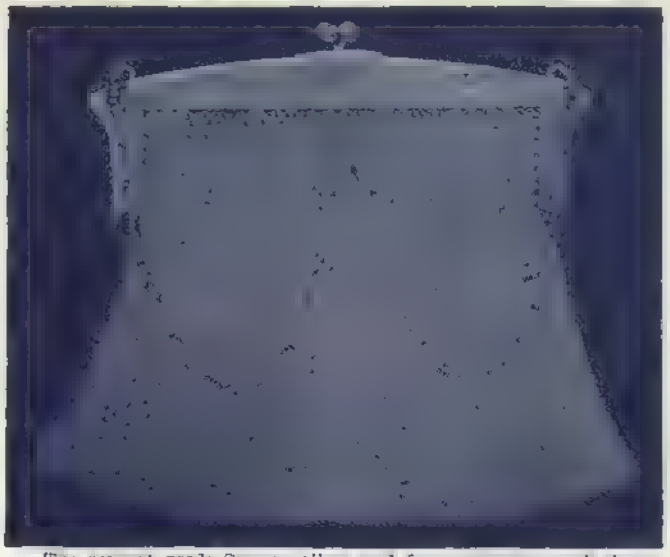
"If one would start his motor on the spark he should speed his motor up, just before stopping it, by opening the throttle wide," says Charles Spiltdorf, who has been in the business long enough to know what he is talking about. "Then if the spark is cut off a full charge is left in the cylinder, to be ignited when another start is to be made."

The best way to remove tar from the body of a car is with linseed oil. Rub lightly on with a stiff rag and leave on till the tar is softened, then polish off with clean soft rag till all the oil and tar are removed; always rubbing in one direction. If the tar is very thickly coated on, then ordinary oil is the best to begin with, and finish off with linseed. When the car is looking dull and scratched, go over it with linseed oil, then polish up lightly.

Locating squeaks about the machine is one of the favorite pastimes of automobile passengers who are helpfully inclined. At times experiment reveals the fact that a noise which has been particularly annoying is stopped when one of the tonneau doors is opened. The explanation is that a slight amount of "working" takes place between the door and its framework. This may be occasioned by a general loosening up of the body frame, or merely by a slight sagging of the centre where it is apt to be weak. If this happens to be the case a simple, though by no means permanent remedy, is to put one or more leather washers over the retaining bolts in the centre of the body, thus bolstering it up at the sagged point.

LADIES' FINE GERMAN SILVER MESH BAGS

Illustrations are reduced size. Heavy silver plated on German silver. Latest and popular styles. Prices each



The highest grade German silver and finest extensible mesh obtainable, every link hand soldered, without seams. Artistically hand pierced and engraved. French gray frame.

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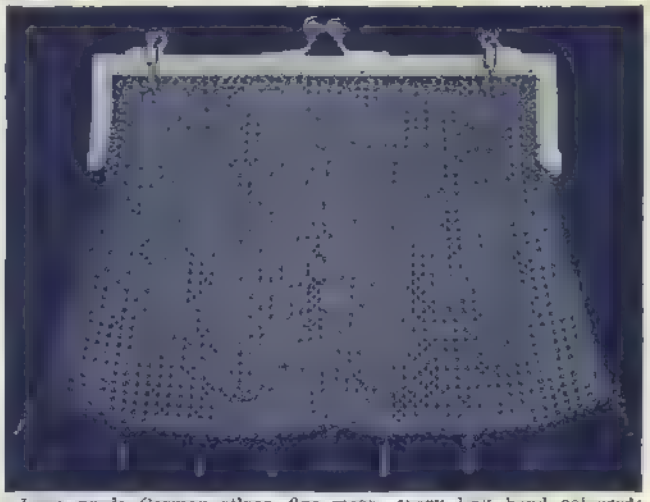

High grade German silver, fine mesh, every link hand soldered; satin finish frame.

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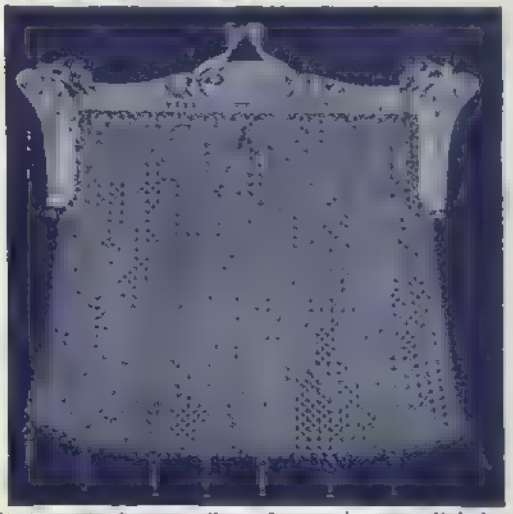

High grade German silver, fine mesh, every link hand soldered, French gray, beautifully carved frame.

No. 9222 6-inch frame ..... Each $26.00
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Our Prices are based upon Small Profits

When you compare Prices, consider Quality

The Fine Soldered Mesh will wear as good and look as well as Sterling Silver

High grade German silver, fine mesh, every link hand soldered, French gray, satin finish, pierced and carved frame.

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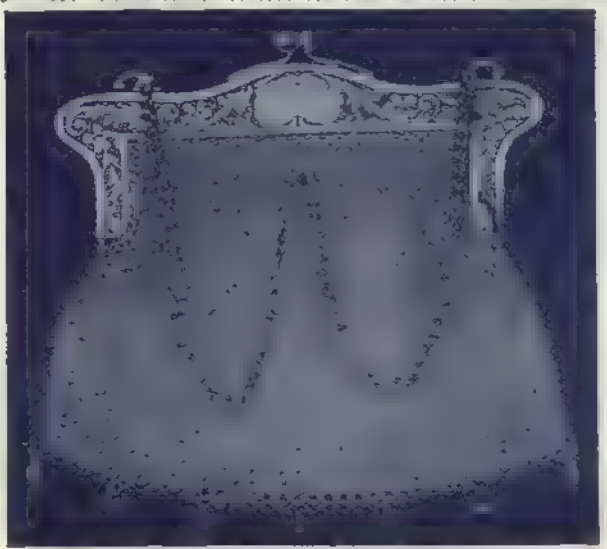

German silver, guaranteed hand made mesh, embossed gray finish frame, white and lined with coin pocket.

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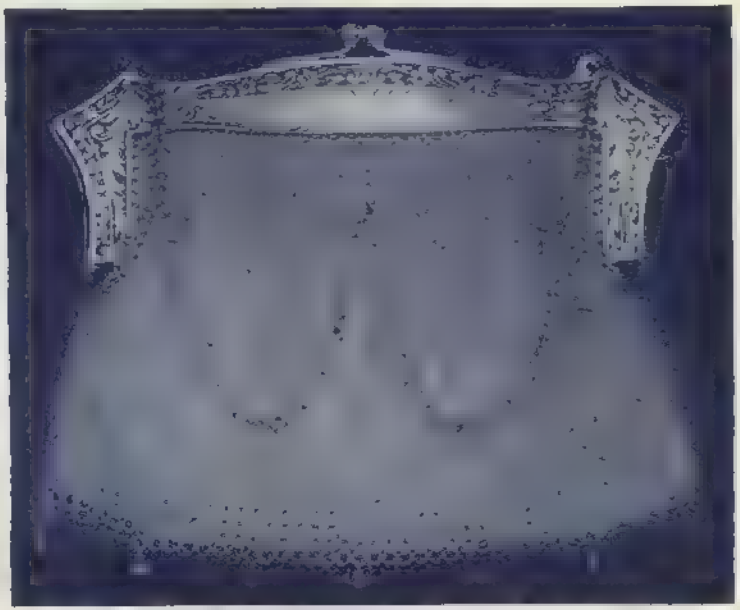

Fine German silver, guaranteed hand made mesh, embossed gray finish frame, white and lined with coin pocket.

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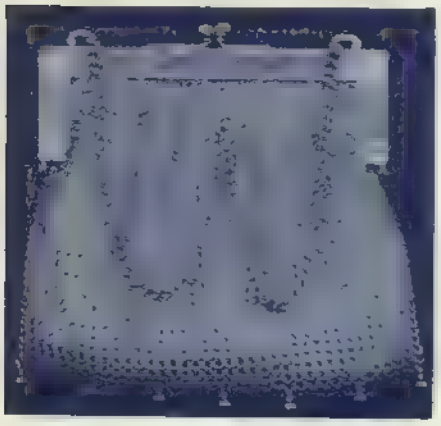
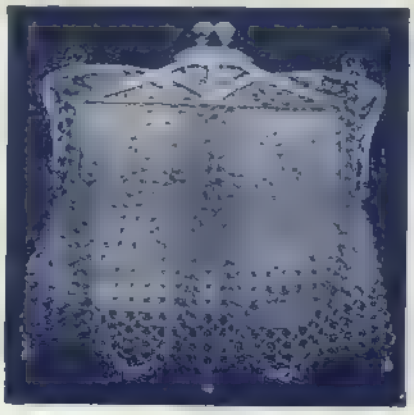
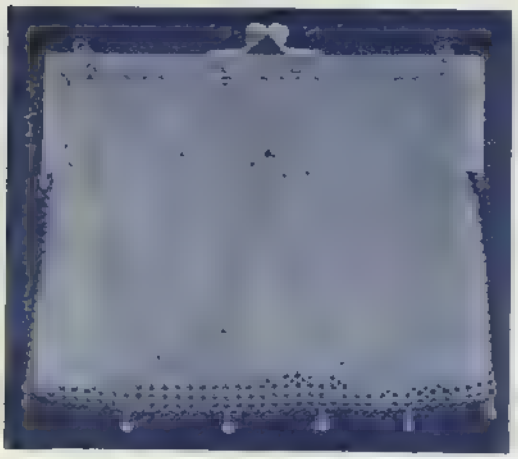


Fine German silver, guaranteed hand made mesh, French gray etched frame, white kid leather lined, with coin pocket
No. 9233 5¼-inch frame. Each $10 25
No. 9234 4½-inch frame. Each . 8.25



Fine German silver, guaranteed hand made mesh, French gray embossed frame, white kid lined, with coin pocket.
No. 9235 4¼ inch frame. Each.....$5.00

Fine German silver guaranteed hand made mesh, French gray embossed frame, white kid lined, with coin pocket
No. 9236 5½-inch frame. Each. $10.50



Fine German silver, guaranteed hand made mesh, French gray embossed frame, white kid lined, with coin pocket
No. 9237 7-inch frame. Each..... $16 50

Fine German silver, guaranteed hand made mesh, durable chain, width 6 inches.
No 9238 Each . $10.50

Fine German silver guaranteed hand made mesh, French gray hand-pierced and etched frame.
No. 9239 5¾-inch frame. Each..... $8.00

Fine German silver guaranteed hand made mesh, French gray, etched frame, white kid lined, with coin pocket.
No 9240 7½-inch frame Each

All mesh guaranteed hand made.

When you compare prices, consider our supreme quality.

The most exacting attention given to all orders, regardless of amount involved.

We base all prices upon small profits thereby underselling our competitors.

Fine German silver, guaranteed hand made herringbone mesh, French gray embossed frame.
No. 9241 6¾ inch frame. Each $12 50

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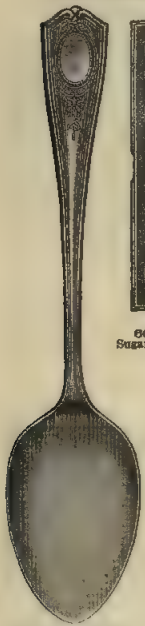
Louis XVI. Pattern

The Latest Community Silver Design Harmonizes Perfectly with the Period It Represents the Later French Renaissance—While in Rich Simplicity It Rivals the Best Examples of Sterling Silver.



Louis XVI. Pattern.
6657 Teaspoons, per dozen..... $7 10
6658 Dessert Spoons, per dozen...$12 85
6659 Table Spoons, per dozen...$14 20
6659½ Iced Tea Spoons, per dozen .. $9 95
6660 Coffee Spoons, per dozen....$7 10

6661 Louis XVI. Sugar Tongs, $1 90 each.

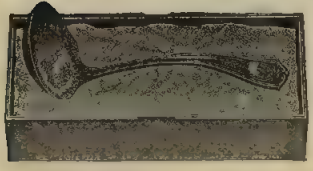
6662 Louis XVI. Berry Spoon, $2 65 each.

6663 Louis XVI. Pickle Fork, $1 40 each.

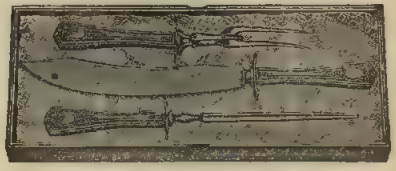
6664 Louis XVI. Cold Meat Fork $1 65 each.

6665 Louis XVI. Individual Salad Forks, Set of 6, in lined box. $7 10 per set.

6666 Louis XVI. Butter Knife and Sugar Shell, in lined box. $2 60 per set.



6667 Louis XVI. Cream Ladle . . . .$1 80 each
6667½ Louis XVI. Gravy Ladle . . . . 2 85 each
6668 Louis XVI. Soup Ladle..... 6 30 each



6669 Louis XVI. Carving Set, Hollow Handle, 3-piece, in lined case, $15 20 per set.

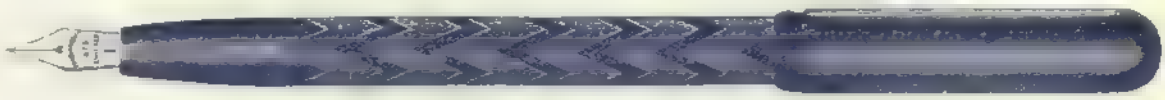
MOONEY'S MODEL SELF-FILLING FOUNTAIN PEN

A MARVEL OF UTILITY AND SIMPLICITY.

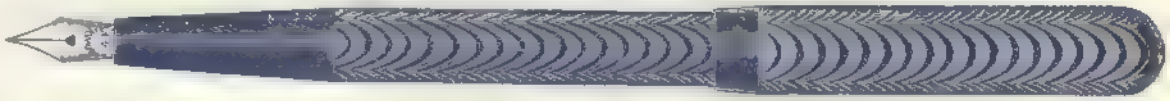
These pens are made by skilled mechanics from the finest grade of materials obtainable. The gold pens are solid 14k gold, pointed with selected iridium. The holders are of the very best grade of Para rubber and the mountings of 18k gold filled seamless tubing. Their popularity rests upon the fact that they are so simple in construction that they cannot get out of order, therefore are at all times reliable, and are fully warranted to be exactly as represented. See sectional view below. The only Unconditionally Guaranteed Pen on the Market

DIRECTIONS FOR FILLING

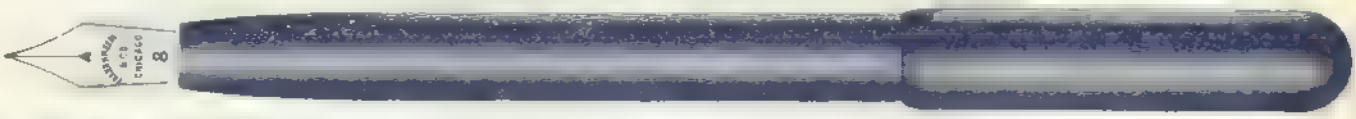
Insert pen in ink till lower end of nozzle B is covered, then blow in air vent F. This forces air out of flexible ink reservoir D, and as soon as lips [illegible] the ink will draw up [illegible]. No soiling of fingers with ink. Easily cleaned by using water and repeating the filling process.



No. G10	Fitted with No. 1 14k solid gold pen, black, mottled or chased holder	Each	$2.00
No. G20	Fitted with No. 3 14k solid gold pen, black or mottled holder	Each	.60



No. G211	Fitted with No. 2 14k solid gold pen, full chased holder	Each	$2.70
No. G311	Fitted with No. 3 14k solid gold pen, full chased holder	Each	3.35
No. G411	Fitted with No. 4 14k solid gold pen, full chased holder	Each	4.00



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No. G40	Fitted with No. 4 14k solid gold pen, black or mottled holder	Each	4.00
No. G6	Fitted with No. 6 14k solid gold pen, [illegible]	Each	4.70
No. G60	Fitted with No. 6 14k solid gold pen, [illegible]	Each	5.35
No. G70	[illegible]	Each	6.00
No. G80	Fitted with No. 8 14k solid gold pen, [illegible]	Each	6.70

No. G33A	Fitted with No. 1 14k solid gold pen, black chased gold filled bands	Each	$3.35
No. G31A	Without gold filled bands	Each	2.60

No. G21	Fitted with No. 2 14k solid gold pen, hand chased, gold filled bands	Each	$ [illegible]
No. G12	Fitted with No. 1 14k solid gold pen, hand chased, gold filled bands	Each	3.00
No. G32	Fitted with No. 3 14k solid gold pen, hand chased, gold filled bands	Each	4.00
No. G42	Fitted with No. 4 14k solid gold pen, hand chased, gold filled bands	Each	4.70

No. G201½	Fitted with No. 2 14k solid gold pen, black, mottled or chased holder, gold filled band, non-breakable cap	Each	$2.35
No. G101½	Fitted with No. 1 14k solid gold pen, black, mottled or chased holder, gold filled band, non-breakable cap	Each	2.70
No. G301½	Fitted with No. 3 14k solid gold pen, black, mottled or chased holder, gold filled band, non-breakable cap	Each	4.00
No. G401½	Fitted with No. 4 14k solid gold pen, black, mottled or chased holder, gold filled band, non-breakable cap	Each	4.70

No. G421	Fitted with No. 4 14k solid gold pen, black chased cap and barrel, gold filled bands	Each	$5.35
No. G331	Fitted with No. 3 14k solid gold pen, black chased cap and barrel, gold filled bands	Each	4.70
No. G221	Fitted with No. 2 14k solid gold pen, black chased cap and barrel, gold filled bands	Each	4.00

No. G23	Fitted with No. 2 14k solid gold pen, black, mottled or chased holder, gold filled bands	Each	$1.00
No. G13	Fitted with No. 1 14k solid gold pen, black, mottled or chased holder, gold filled bands	Each	2.75
No. G33	Fitted with No. 3 14k solid gold pen, mottled, black or chased holder, gold filled bands	Each	4.70
No. G43	Fitted with No. 4 14k solid gold pen, mottled, black or chased holder, gold filled bands	Each	5.35
No. G53	Fitted with No. 5 14k solid gold pen, mottled, black or chased holder, gold filled bands	Each	6.00
No. G63	Fitted with No. 6 14k solid gold pen, mottled, black or chased holder, gold filled bands	Each	6.70

Mooney's Model Self-Filling Fountain Pens—CONTINUED

SEE AND READ TOP OF PRECEDING PAGE.

No. [illegible] Fitted with No. [illegible] 14 karat solid gold pen, [illegible] gold filled mounted barrel [illegible] Each, $5.00

No. G39 Fitted with No. 3 14 karat solid gold pen, fancy or white pearl, gold filled mounted barrel.....Each, $8.00

No. [illegible] Fitted with No. 4 14 karat solid gold pen, [illegible] gold filled mounting, [illegible] sterling silver [illegible] Each, $10.70

Ladies' Fountain Pens, Non-Self Fillers

[illegible]

No. G039 Fitted with No. 1 14 karat gold pen in plain white or fancy pearl gold filled mountings . Each, $6.70

No. G044 Fitted with No. 1 gold pen, sterling silver or gold filled, engraved mounting ..... Each, $8.00

The "Fort Dearborn" Latest Model Self-Filling Fountain Pens

A Marvel of Utility and Simplicity. Named for us by the Largest Factory in the Business.

Patented Sept. 12, 1905. Patent No. [illegible]

Any Pen Duplicated If Not Satisfactory or Money Refunded

[illegible] Pen Ready to Take [illegible]

Our Name An Absolute Guarantee of Quality and Workmanship.

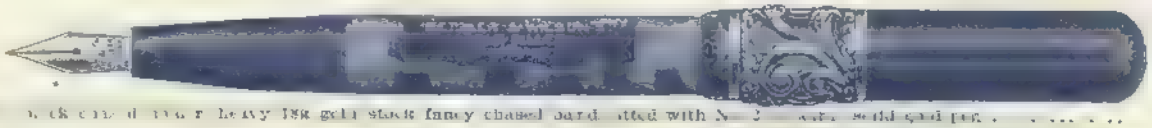
The inner device for self-filling has been tried out and pronounced the only practical fountain pen with a simple and efficient self-filling device.

Showing Pen Lifted.

THIS PEN IS GUARANTEED.

No. 2 Fancy black chased holder, fitted with No. 2 14 karat solid gold pen ..... [illegible]

No. 3 Plain black holder, fitted with No. 3 14 karat solid [illegible] Pen . . . . . [illegible]



No. 4 [illegible] black chased over heavy 18k gold stock fancy chased band, fitted with No. [illegible] karat solid gold pen . . . . . [illegible] $5.00

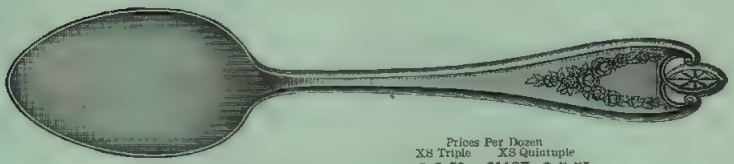
No. 5 Fancy [illegible] Holder, heavy 18k gold stock fancy band, suitable for engraving name or initials, fitted with No. 5 14 karat [illegible] per [illegible] Each, $5.70

1847 ROGERS BROS. XS TRIPLE

Old Colony Pattern

Finished in French Gray.

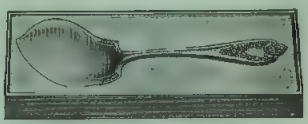
The Latest, Most Exquisite Pattern in Silver Plated Ware.



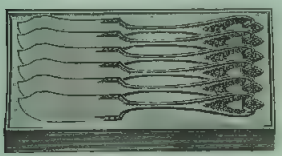
		Prices Per Dozen XS Triple	XS Quintuple
C111X	Tea Spoons	$ 6 50	C112X $ 8 85
C113X	Dessert Spoons	11 60	C114X 15 90
C115X	Table Spoons	13 00	C116X 17 70
C117X	Dessert Forks	11 60	C118X 15 00
C119X	Medium Forks	13 00	C120X 17 70

C121X Old Colony, Hollow Handle Cheese Server
$1 40 each

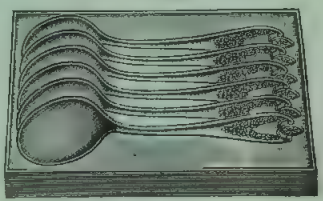
C124X Old Colony Straight Handle Baby Spoon in Lined Box.
$0 85 each.



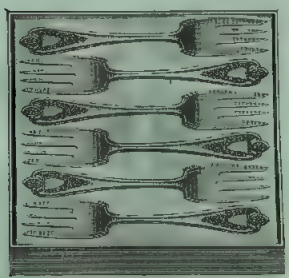
C122X Old Colony, Jelly Knife.
$1 40 each.



C123X Old Colony, Six Butter Spreaders
$6 00 Set



C125X Old Colony, Six Soup Spoons
$6 50 Set.



C126X Old Colony, Six Individual Salad Forks
$6 00 Set.

C127X Old Colony, Sugar Shell in Lined Box
$1 25 each.

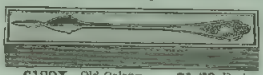
C128X Old Colony, Butter Knife, Sugar Shell and Cream Ladle, $4 55 Set.

The Above Prices are Subject to the Regular Discount.

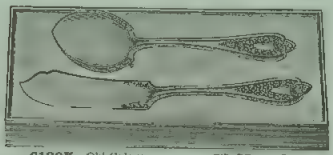
"THE HOUSE OF QUALITY"

1847 ROGERS BROS. XS TRIPLE

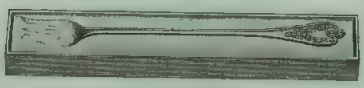
Old Colony Pattern



C129X Old Colony, **$1 20** Each
Butter Pick in Lined Box.

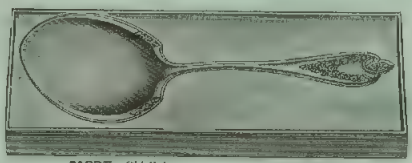


C130X Old Colony, - **$2 50** per Set.
Butter Knife and Sugar Shell in Lined Box

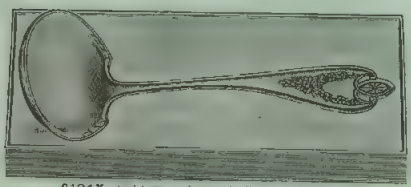


C131X Old Colony, - **$1 50** Each.
Pickle Fork, Long, in Lined Box.

C132X Old Colony, **$1 75** Each
Cold Meat Fork, in Lined Box



C133X Old Colony, - **$2 75** Each.
Berry Spoon, in Lined Box



C134X	Old Colony	Cream Ladle,	**$1 60** Each.
C135X	"	" Gravy "	**2 15** "
C136X	"	" Oyster "	**4 55** "
C137X	"	" Medium "	**5 95** "

Put Up in Lined Boxes.

The Above Prices are Subject to the Regular Discount.

"THE HOUSE OF QUALITY"

Old Colony
Hollow Handle
C138X Medium
Knives, **$23 00** Doz
C139X Dessert
Knives, **$21 00** Doz
C140X Medium
Forks, **$23 00** Doz
C141X Dessert
Forks, **$21 00** Doz.

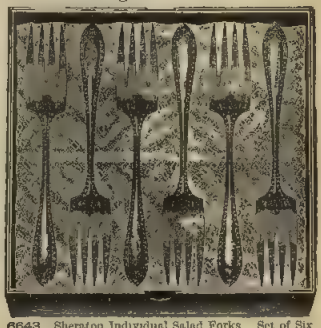
Old Colony
Flat Steel Handle
16 Dwt. French Gray
Finish
C142X Medium
Knives, **$9 50** Doz.
C143X Dessert
Knives, **$8 25** Doz.

Community Silver

Sheraton Pattern

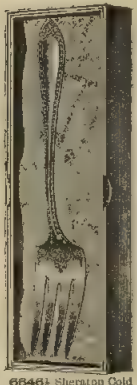
Sheraton, our latest design in Community Silver, is a masterpiece of artistic designing. Simple but exquisitely beautiful in outline and ornamentation, it rivals Sterling Silver in distinction, and harmonizes perfectly with the richest of table settings.

6642 Sheraton Three Piece Child's Set, Hollow Handle Knife, **$3 50** per set.



6643 Sheraton Individual Salad Forks. Set of Six in Lined Box. **$7 10** per set.

Sheraton Pattern
6644 Tea Spoons, **$7 10** per dozen
6644½ Dessert Spoons, **$12 80** per dozen
6645 Table Spoons, **$14 20** per dozen
6645½ Iced Tea Spoons, **$9 95** per Dozen
6646 Coffee Spoons, **$7 10** per dozen.



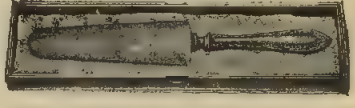
6646½ Sheraton Cold Meat Fork, **$1 65** each.

6647 Sheraton Butter Knife and Sugar Shell, Plain, in lined box. **$2 00** per set.

6647½ Sheraton Orange Spoons, Set of Six in Lined Box. **$4 75** per set.

6648 Sheraton Cream Ladle. **$1 80** each.
6648½ Sheraton Gravy Ladle. **$2 35** each.
6649 Sheraton Medium Soup Ladle. **$3 30** each

6649½ Sheraton Berry Spoon. **$2 65** each.



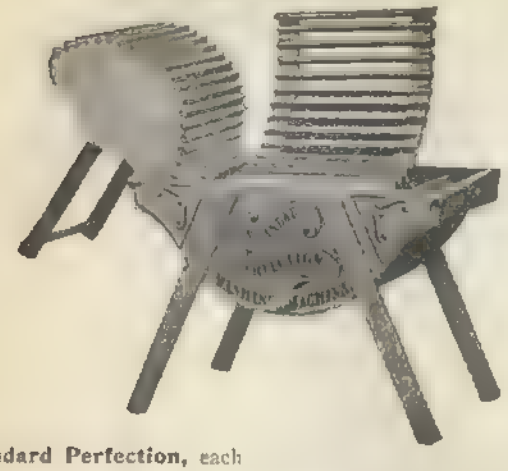
6650 Sheraton Hollow Handle Pie Server. **$3 25** each.

Our Salesman Catalog is to the Merchant What the Compass is to the Mariner, "An Indispensable Ready Reference."

"THE HOUSE OF QUALITY"

WASHING MACHINES

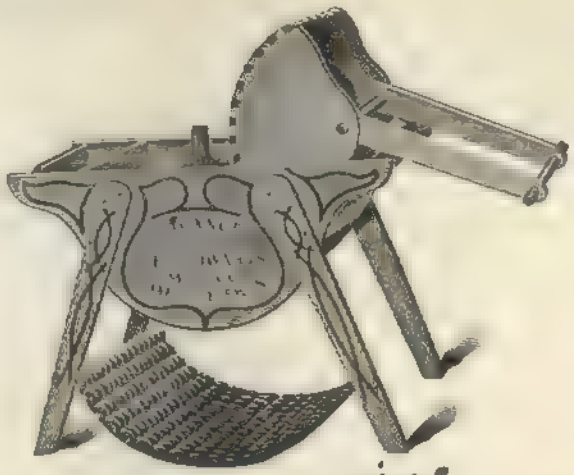
STANDARD PERFECTION



Standard Perfection, each $3 50

Capacity 6 shirts. Made of cypress wood and varnished. Has diamond rubbing strips which perfectly washes the most soiled garments by the circulation principle. The upper rubbing board is solid and when can be hung on end of machine when clothes are put in. The lower rubbing board can be easily removed from the machine.

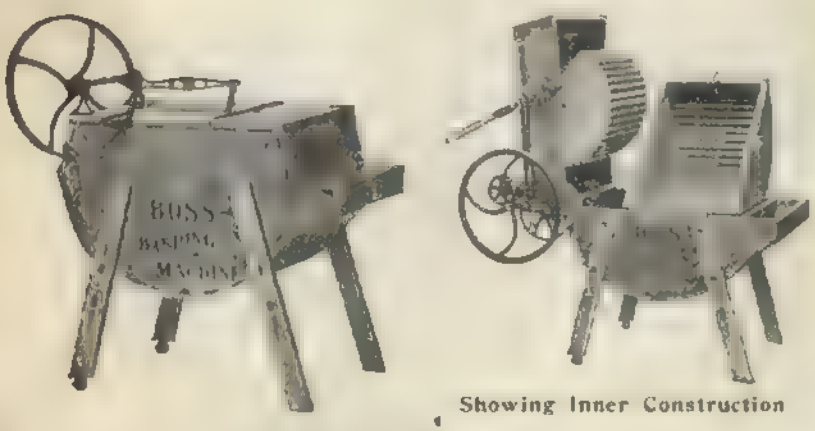
ADVANCE



No. 2. Bar movement, per dozen $36 00
No. 3. Bail movement, per dozen . 38.00

Length 28½ in., width 19 in., depth 14 in., height 25 in. Natural finish. No. 2 has cast ears. No. 3 has steel bail. Removable bottoms in each.

BOSS



Showing Inner Construction

Nos. 1 and 2

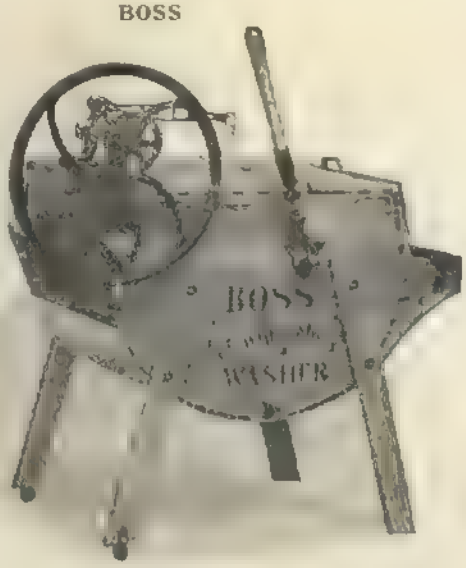
No. 1. Boss, for small family, each $7 50
Capacity, 10 shirts or their equivalent.

No. 2. Boss, for medium family, each $8 50
Capacity, 12 shirts or their equivalent.

Made of cypress with stays are galvanized. There are no bolts, screws or pins to manipulate. The lower cylinder can be easily and quickly removed to clean machine. The clothes are between two rub boards which oscillate in opposite directions when machine is operated by turning the hand wheel one way.

Will wash large or small pieces equally as well. Easy to operate.

BOSS



Nos. 32 and 33

No. 32. Boss, for home use, each $12 00
Capacity, 12 shirts or their equivalent.

No. 33. Boss, for hotels and institutions, each .$12.00
Capacity, 15 shirts or their equivalent.

Made of Louisiana red cypress, finished in natural colors. Iron parts are electro galvanized. Has high speed attachment; every 50 strokes of the operating lever the fly-wheel makes 300 revolutions and it requires but little additional power to keep the machine running. These machines rub the clothes between two semicircular rub boards oscillating in different directions and forcibly drives the water through every fibre.

Can be equipped to operate by power.

WASHING MACHINES

UNEEDA

Uneeda. Capacity 8 shirts, each $4 00

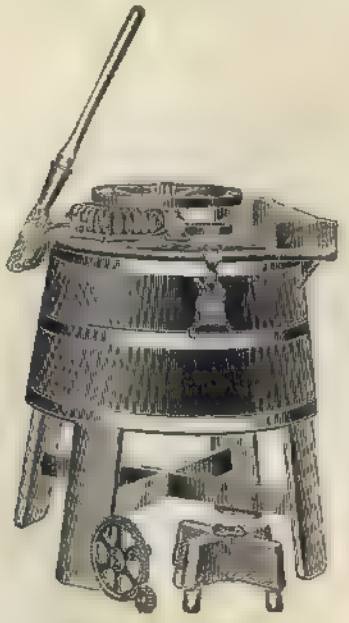
The tub is of best red cypress, finished in the natural wood and varnished. Sides and bottom are deeply corrugated. The dasher block is of cypress and will not warp or split; the under side is corrugated and in addition has 4 pegs to assist in washing. The lid is fastened with detachable hinges. Fitted with wringer attachment

TWO SPEED FOUR STROKE

Two Speed Four Stroke Rotary Washer, each . $7 50

A well made, finely finished and very serviceable machine. Has two speeds, regular for heavy pieces and high speed for small or light pieces. Can be changed instantly. Has 4 strokes and plunges the clothes up and down and turns them back and forth in the tub. It has a malleable gear and is a simple and strong machine.

MICHIGAN MOTOR HIGH SPEED



Michigan Motor High Speed, each.....$11.00

Well made in every particular and nicely finished, has a four wing clothes agitator. Washes everything from finest fabrics to heaviest clothing. Automatic lid lifter, spiral cut gears. A satisfactory machine in every way.

WATER MOTOR WASHER
ATLAS

Atlas Motor Washer, each.. . . ..$15.00

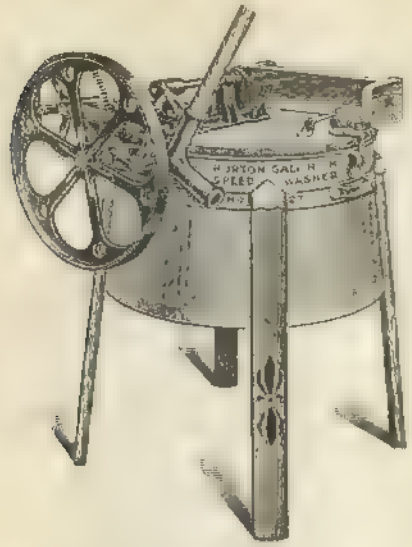
The power motor is made entirely of brass and is guaranteed for 3 years. The intake is protected by a screen. Can be taken apart and put together with a screwdriver. The dolly is so designed it is impossible for it to tear or injure the most delicate fabric.

The motor will operate under as low a pressure as 20 pounds.

The machine should operate 15 to 30 minutes according to the condition of the wash.

HORTON WASHING MACHINES

GALVANIZED HIGH SPEED WASHER



No. 27. Galvanized high-speed washer, each .....$

Inside Dimensions

Diameter at top, in.....	22
Diameter at bottom, in	24
Depth, in	1.
Shipping weight lbs . .	100
Price . . . .$	

A new high-speed momentum mechanism on a galvanized steel tub, with large opening at top.

No heavy castings on lid to be lifted each time lid is opened.

Extra large bearings, carefully fitted, causing least possible friction.

Tub is constructed of strong black steel and heavily galvanized after it is put together.

An ideal machine for hot and dry climates, as it cannot shrink.

Fly wheel enameled green; all other castings aluminum bronzed, which makes an attractive appearance.

By ordering an 8 in. pulley wheel, which the factory furnish and which interchanges with the fly wheel, this machine can be operated by gasoline engine power.

COMBINATION WASHER

No. 25. Horton combination washer, each .....$.

Inside Dimensions

Diameter at bottom, in	22
Diameter at top, in	30
Depth, in. ..	11
Shipping weight, lbs	165
Price, each ..	$

A combined washing and wringing machine for gasoline engine power.

No tight or loose pulleys required as the pulley wheel stays in position when the lid is raised.

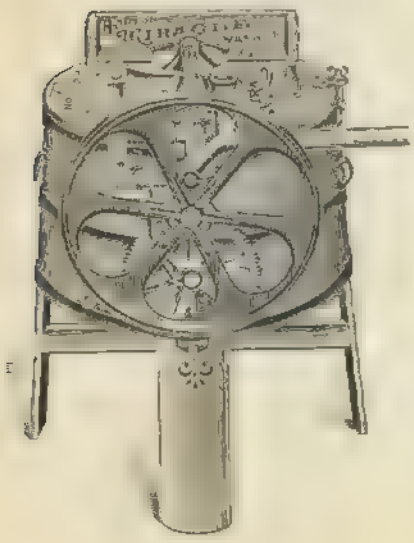
By having a fly wheel on hand, which interchanges with the pulley, the machine and wringer can be operated by hand, in case anything should happen to the engine.

The reversible wringer is equipped with patented automatic safety device which will prevent injury to fingers.

The tub is made of Louisiana red cypress, natural finish; pulley enameled green, balance of castings gold bronzed.

Steel frame wringer, ball bearing, and has 1¾ x 10 in. rolls guaranteed five years.

HORTON MIRACLE WASHER



No. 22. Horton Miracle Washer, each . . $

Inside Dimensions

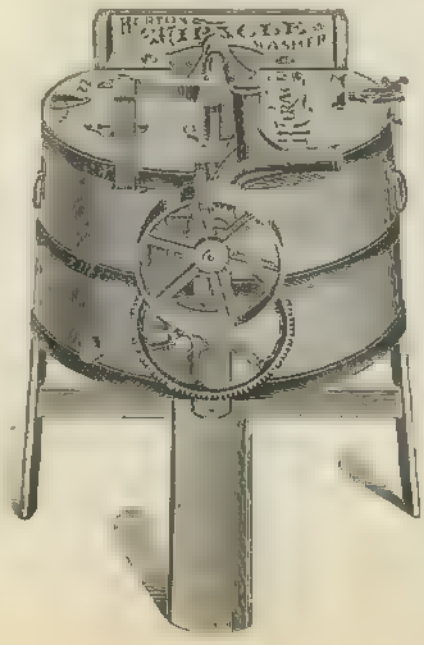
Diameter at bottom, in	22
Diameter at top, in.	30
Depth, in . .	11
Shipping weight lbs	130
Price	$

The Horton Miracle Washer No. 22 is a combined momentum hand and power machine. The bearings are extra large to cause least friction. The castings are extra heavy to guard against breakage. The operating lever can be placed either in a horizontal or perpendicular position instantly, to suit convenience of operator.

To convert into a power machine, the fly wheel can be replaced with an 8 in. pulley. The dealer can carry a few of these pulley wheels in stock, which the factory furnish, to supply his customer who has a gasoline engine or any other kind of power. No tight or loose pulleys or guides are required as the power need not be shut off when lid is opened.

The tub is made of the best grade of Louisiana red cypress, in natural finish. The heavy lid covers three-fourths of the top of tub, giving easy access to the interior.

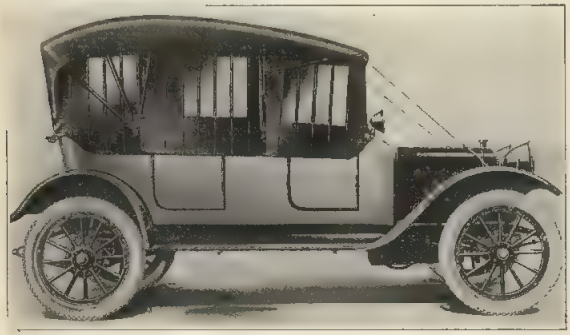
The castings are gold bronzed, fly wheel, hoops and pulley wheel green enameled.



The 1913 R. C. H.

R. C. H. cars for 1913, manufactured by the R. C. H. Corporation, Detroit, Mich., embody few changes over the initial model of 1912 season. This car, which sells at $900, f. r 1913 now has hand spark and throttle levers under the steering wheel.

section, integral spring seats and steering yokes. Front springs are semi-elliptic; 33 x 1½ in., and these are the same as last season. The rear springs are suspended from the rear axle tubes and are 42 x 1¾ in., provided with swivel seats. Leaves are of spe-



The 1913 R. C. H.

Jiffy side curtains which are applied and detached in short space of time and when in place afford ample protection from the elements. These curtains are features of the 1913 equipment

The Motor.

There are no mechanical changes in the motor, which is four-cylinder, en bloc, 3¾ in. bore, 5 in. stroke, with a two-bearing crank shaft. The valves are located on the left side and the springs are enclosed by metal cover plates. The magneto on the left is provided with a universal coupling of improved design, drive from the motor gears, which are spur cut and fully enclosed. Cooling is by thermo syphon system, with liberal intake and outlet pipes. The carburetor is placed on the right and is equipped with a flexible hot air pipe leading to the carburetor jacket. The crank case oil supply may be renewed through a large, accessible breather on the right side. Support of motor is at three points.

Transmission.

No change has been made in the three-speed, selective sliding gear transmission which is disposed on the rear axle. There is no change in the control of the gear set, which is through the hand lever, ball topped, this working in an H gate.

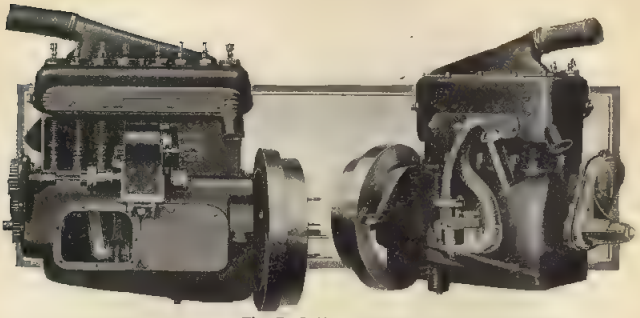
Axles, Springs and Chassis.

The semi-floating rear axle of the past season is perpetuated, having been found very satisfactory. The construction is standard. The front axle is a drop forging, I-beam

cial spring steel and held in place with safety clips. The full elliptic rear sets are slightly inclined.

The frame is pressed steel and is as heretofore. The step brackets are drop forgings; in fact, forgings are used throughout the car in preference to other construction,

Controls of the 1913 R. C. H. Steering is from the left, clutch and service brakes pedal, speedometer, horn bulb and ventilator are shown.



The R. C. H. Motor.

Two views of the motor are here shown, giving an idea of the working side of the four-cylinder en bloc motor, valve springs enclosed by plates, one of which is removed to show the construction; the crank case is accessible by removing hand covers. The carburetor side of motor shows the flexible hot air pipe which leads warm air to the mixing chamber.

wherever practicable. The channel is sufficiently deep to ensure strength where it is needed.

Wheels are wood, artillery type fitted with 32 x 3½ in. non-skid tires and demountable rims. Wheel base is 110 in.

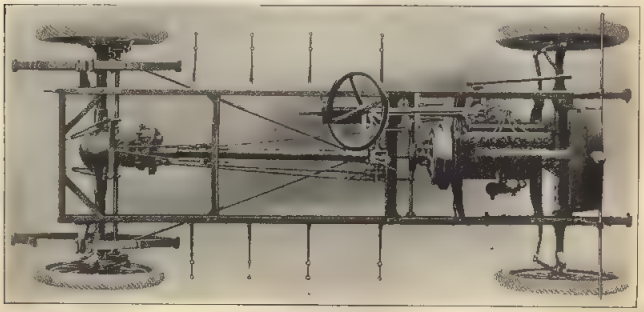
That distinctive feature of the R. C. H. car of last season is found in the 1913 successor, the English type of body, which is full five passenger, with extra wide cushions, the seat cushions being 10 in. deep

Body is made of metal and is flush sided, fore-door type, very neat and trim in appearance. The cowl rises abruptly upward and backward, is deep and adds materially to the neat appearance.

As to control, in addition to features mentioned above, clutch is worked by pedal as are the running brakes, these contracting bands on the rear wheel drums. Steering is from the left side through an irreversible worm and gear, wheel 16 in. in diameter. Control levers, as above noted, are under the wheel.

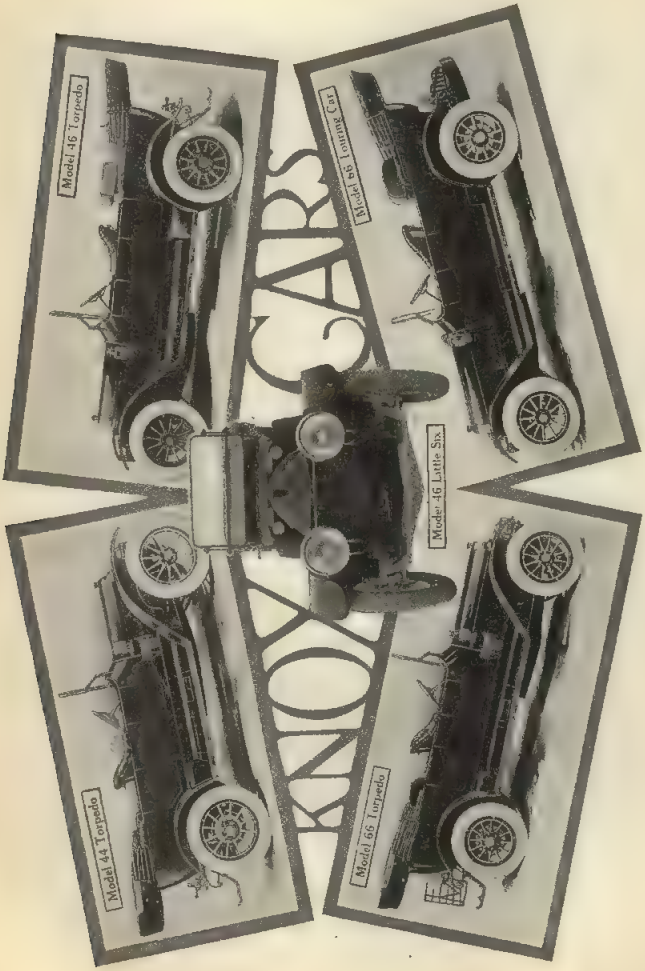
The Equipment.

Twelve-inch bullet electric headlights with double parabolic lenses, 6-in. side bullet electric lamps with parabolic lense equipment and an Exide 100 ampere hour battery are included in this season's equipment. A Warner auto meter, extra demountable rim and holders, tally-ho horn under the hood, jiffy curtains, top and cover, wind shield, rear view mirror, tool kit, jack, tire repair outfit, pump and robe rail are also included in the equipment. With the exception of the top, tally-ho horn, and repair outfit, the equipment is new this year.



The 1913 R. C. H. Chassis.

Top view of the chassis which affords a good idea of construction. The motor is supported at three points, clutch is cone type, drive to the rear axle transmission is through a universal jointed propeller shaft. Note the brace rods through which the car is driven


KNOX CARS
Model 46 Torpedo
Model 66 Touring Car
Model 46 Little Six
Model 44 Torpedo
Model 66 Torpedo

POST DRILLS

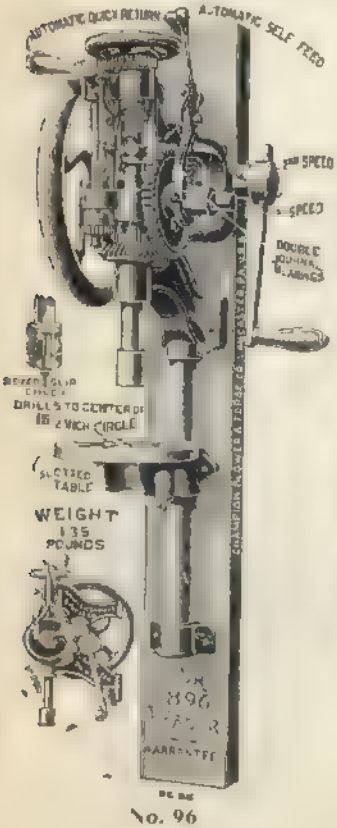
THE CHAMPION BLOWER AND FORGE CO.

SELF-FEED BLACKSMITHS' POST DRILL

Is well built, has a slotted square table lathe-turned. It is a strong and stoutly proportioned drill for a drill of this size. Has full back gear with one speed. It is to center of a 14 inch circle bearings ... ll ground from the solid metal and is built in the perfect mechanical manner as ... of gears. Will bore ... to 1 inch. Has spindle 1¼ inches in ... speed has an up-and-down run of 3 inches ... bored like Never Slip Chuck to take in ... inch straight shank drills

No. 90. Champion Self-feed Blacksmiths' Post Drill Weight 100 pounds..... $8 50

*QUICK-RETURN BLACKSMITHS' SELF-FEED POST DRILL



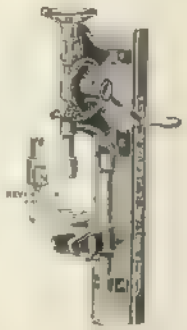
No. 96

The quick return lever is thrown into place while the drill continues in motion where it remains until the bit is raised out of the work, when it automatically ... to ... what ... the operator ... to ... ready to start the next hole

... is back geared with ... improved third-gear principle. The crank has a forward motion on both first and second speed, the third ... part of the handle being ... gear with the second ... turning ... pulling along an intermediate or third gear while working the first speed

No. 96. Will drill from ⅛ to 1¼ inch hole, each..... $12 50

HAND FEED



No. 92

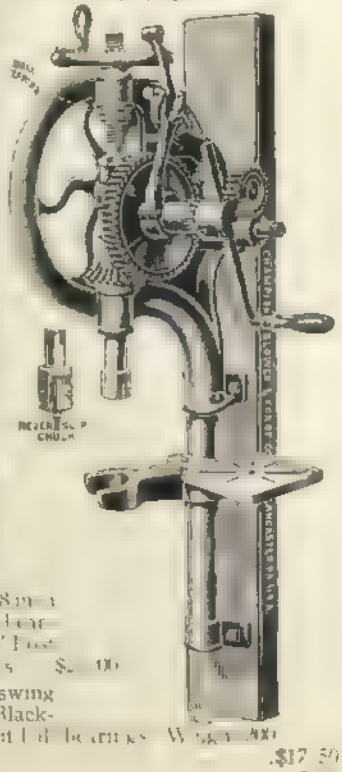
No. 92. Champion Hand Feed Drill will drill to center ... a 12 inch circle and a hole ⅛ to ¾ in ... has a ... table, planed off on top side ... steel ... Up and down run of 3 in ... straight shank drills Weight 65 pounds. Each..... $6 00

SELF FEED

No. 101

No. 101. Champion Self Feed Drill. Will drill to center of a 12 in circle. It has back gears and a slotted lathe turned table. Spindle ... Drills hole up to ¾ in. Up and down run of 3 in. ... straight shank drills. Weight 80 pounds. Each. $7 00

NEW IMPROVED, 18 INCH SWING, THREE-GEARED, BALL-BEARING, UPRIGHT, SELF-FEED, BLACKSMITHS' POST DRILL



It is full back-geared with improved third-gear principle, which gives the second speed the same crank motion as on the first speed, our improved third-gear being part of the handle hub It is therefore disengaged after using the first speed. It is supplied with latest and most improved automatic self feed. It has two speeds ... Double journal bearings to ... working parts. The ... bearings are all ground and polished out of ... steel and ... every ... spindle first class. The table is ... and planed off on ... side. It will drill to the center of an 18 inch circle ... from the spindle ... inches. It has ... down run of 5 inches. Spindle bored like Never Slip Chuck to take in ½ inch straight shank drills

No. 4. Champion improved 18 inch swing three geared ball bearing ... Blacksmiths' Post Drill. Weight 200 pounds ... $... 00

No. 4. Champion 18 inch swing three geared ... self feed Blacksmiths' Post Drill, with ball bearings. Weight 300 pounds $17 50

Extra for power ... 3 00

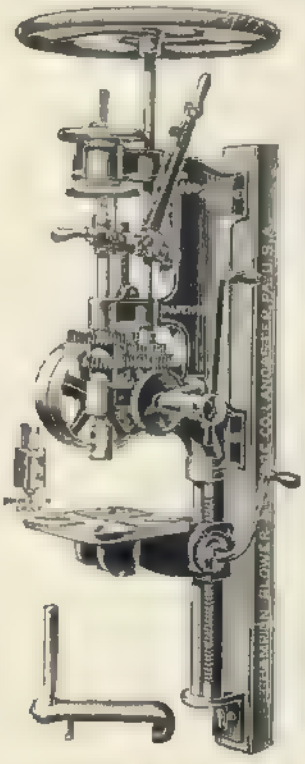
*Not carried in stock, but shipped direct from factory, Lancaster, Pa.

*POST DRILLS

THE CHAMPION BLOWER AND FORGE CO.

COMBINATION AUTOMATIC SELF-FEED AND DOUBLE COMPOUND LEVER-FEED UPRIGHT POST DRILL

Made With Cut Gears and Ball Bearings



...ished with ... wheel hanger for drilling ... Spindle has up and ... and ... Spindle bored ... Never Slip Chuck for ... straight shank bits ... especially ordered will ... for ½ in straight shank bits. Drills holes from 0 up ... in.

No. 203. Champion "Patented" Automatic Self-Feed and Double Compound Lever-Feed Upright Post Drill with cut gears and ball bearings, is bored through the center of the 2¼ in. circle, with concave pulleys and ... countershaft ... for power and ... or Pulley. Weight ... lbs. $75.00

No. 203 ... Champion "Patented" ... Automatic Self-Feed and Double Compound Lever-Feed Drill ... above described ... with ... and Loose pulleys ... for belt or power combined. Weight 425 lbs. $54.00

No. 203. ... Champion "Patented" Automatic Self-Feed and Double Compound Lever-Feed Drill, as above described, for hand only. Weight 400 lbs. $50.00.

*Not carried in stock ... shipped direct from factory. Lead time ...

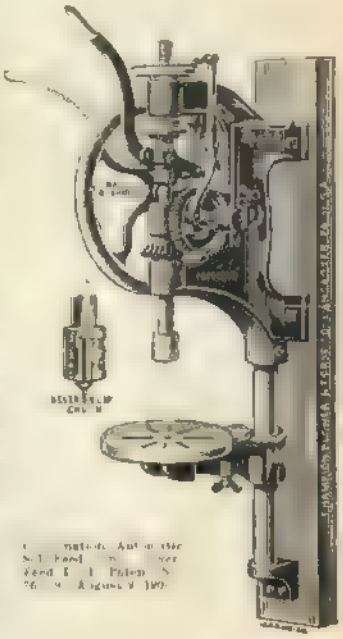
COMBINATION AUTOMATIC SELF-FEED AND LEVER-FEED UPRIGHT POST DRILL

Made With Ball Bearings

This drill has double back gears. Has two speeds. The crank on the ... speed turns a steel pinion into the ... and ... the ... to the ... cle. The spindle has an up-and down run of 4 inches. Has a spindle 1¼ inches in diameter, is bored ... Never Slip Chuck to ... straight drill bits. Will ... holes up to 1¼ inches.

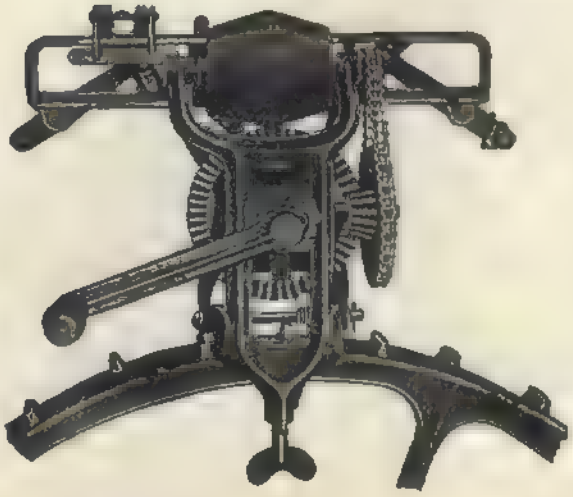
The great ... advantages obtained from the Champion "Patented" ... Self-Feed ... Lever-Feed ... the ... by the ... of the ... of the ... to the ... outside ... back ... to bore the ... ...

No. 200. Champion "Patented" Combination Automatic Self-Feed and Lever-feed Upright Post Drill. Weight 180 lbs. $25.00



KNIFE GRINDERS

THE "DIAMOND" BEVEL WHEEL



Diamond Knife Grinder, each $5 00
Extra Shafts 1 00
Extra Chains .. 25

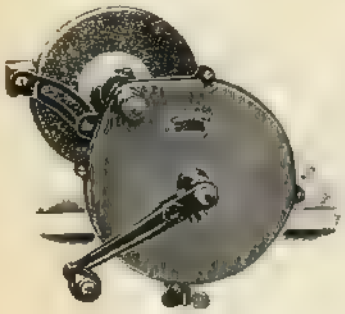
Grinds at Any Desired Bevel

The construction is such that the grinding stone can be instantly set to grind knives at any desired bevel. Nicks and gaps can be ground out easily, and in addition the knife can be ground in any possible way that may be desired. The grinding wheel runs at a high rate of speed by means of a steel chain belt, which does away with noisy and hard running gears, and no clamping is required to hold the knife in a position to grind. There are only two gears in the entire machine and the chain belt is of a large size and almost indestructible. All of the shafting is lathe cut from the very best cold rolled steel and the bearings are all nicely reamed to fit, prevent wear and to support the grinding wheel rigidly at the high rate of speed at which it runs. The castings are all neatly japanned and as thoroughly ... as on sewing machines or similar work. The emery wheel is the very best obtainable and will neither glaze nor draw the temper from knives. When desired, we furnish, at an additional cost, a straight-faced stone which may be used in place of the regular bevel stone for tool grinding, etc. Each machine is securely packed in a neat wooden case. It is almost completely assembled, and the work necessary to put the grinder in working condition can be done by anyone in less than one minute.

Cut Easy TOOL GRINDERS

All "Cut Easy" Grinders are Fitted with Carborundum Wheels

They are of the enclosed gear type, selfoiling, and the internal friction loss is small. Bearings will not overflow oil. They are well made, simple in design, compact and noiseless.



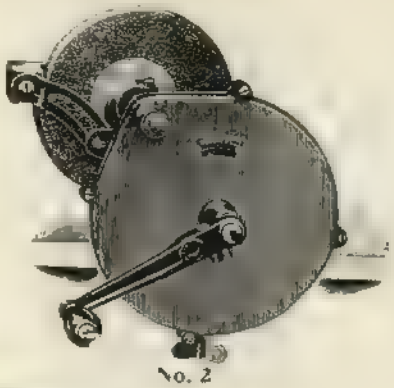
No. 1

No. 1. Size of grinding wheel 4 x ¾ in., weight boxed 6½ lbs., each... ..$.

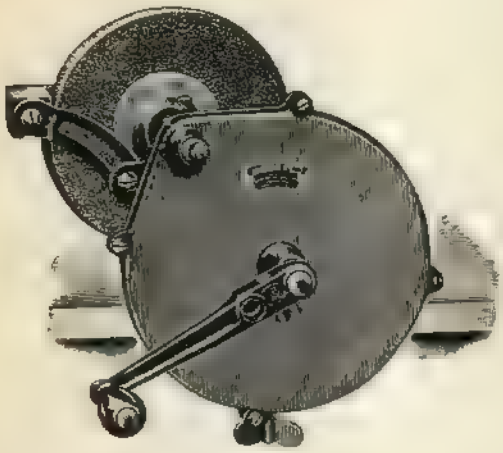
Designed for household use and handy for many purposes

No. 2. Size of grinding wheel 5 x 1 in., weight boxed 9 lbs., each..... $....

Tool chest size for carpenters and mechanics and as important to a collection of tools as a plane or chisel

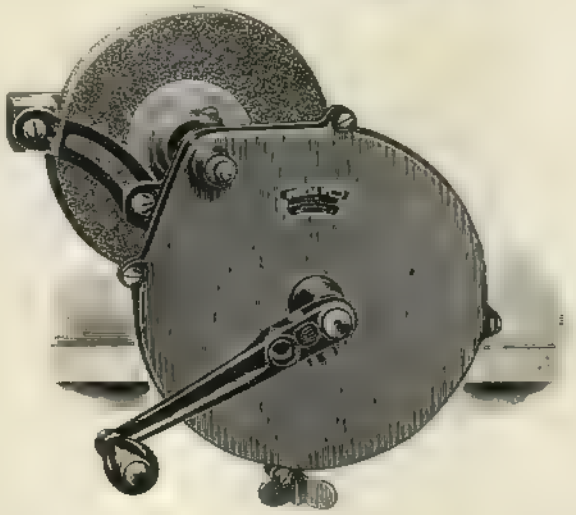


No. 2



No. 3. Size of grinding wheel 6 x 1 in., weight boxed 13 lbs., each .....$....

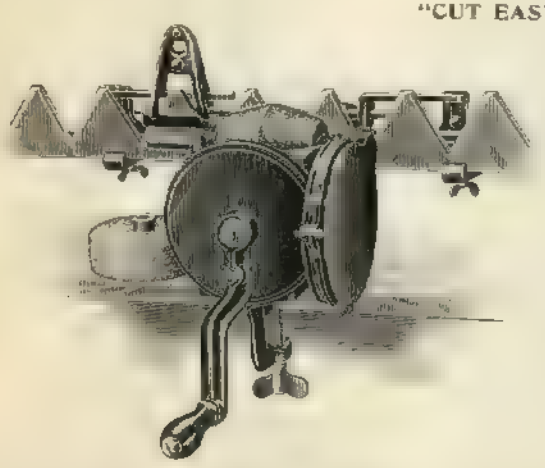
A popular size for small repair shops, monumental workers and private garage owners.



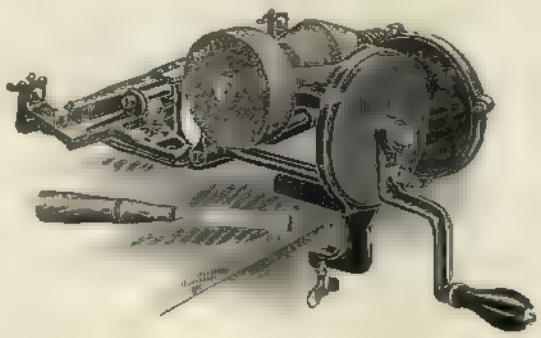
No. 4. Size of grinding wheel 7 x 1 in., weight boxed 24 lbs., each..... $

An individual bench grinder for factories and machine shops, camps, mines, etc.

"CUT EASY" SICKLE GRINDERS



As a Sickle Grinder

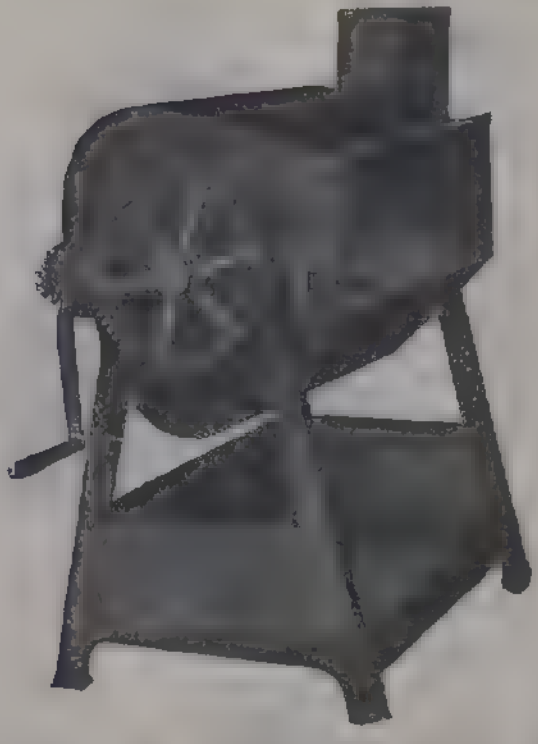


This Illustration Shows the Tool Wheel in Place

No. 5. Equipped with two grinding wheels, one sickle cone 3½ x 3½ in. and one 4¼ x 1⅜ in. flat faced tool wheel. It is the only hand power sickle grinder constructed on the enclosed cut gear type. Fitted with "regulation sickle holding attachment" capable of holding practically every make of sickle.

CONCRETE MACHINERY

For Direct Shipment from Near-by Wisconsin Factory



CONVERTIBLE HAND AND POWER BATCH MIXING MACHINE

This machine is a large cut practical hand mixer which can be converted into a power machine by purchasing the necessary pulleys. It is made entirely of iron and steel. Has heavy cast iron drum heads and cold rolled high carbon sheet steel shell. The two drum heads and shell are held together by rods and the drum is practically water tight. The door and wetting device are the same as those on the No. 21 Machine shown on preceding page.

Specifications—Length of Drum 36 in., circumference 84 in., Diameter 28 in., Capacity 4 cu. ft., Height over all 4½ ft., Length 4¾ ft., Speed 16 R. P. M.

	Each
No. 3—Hand Batch Mixing Machine	$78 00
Weight 450 Lbs. Each	
No. 30—Power Attachment to convert above machine into a Power Mixer	21.00

HAND BATCH MIXING MACHINE

This machine is designed to take the place of a power mixing machine for use at out lying farm and other work where the speed is not important. It is made with cast iron drum heads and cold rolled steel shell, which are held together by rods. Has [illegible] on one journal head. Wetting device the same as No. 21 Machine shown on preceding page.

Specifications—Length of Drum 40 in., circumference 72 in., Diameter 24 in., Height [illegible], Capacity 8 cu. ft.

	Each
No. 4—Hand Batch Mixing Machine	$36 00
Weight 275 Lbs. Each	

DOVETAIL SILO BLOCK MACHINES

Made of heavy gray iron castings, consisting of base and flask or mould. These machines are made in different sizes for different diameter silos. Silo machines can be furnished for 12, 14, 16 or 18 ft. silos, and also for 9 in. or 10 in. width. All blocks are 8 in. high and 16 in. long. This machine can be used for three different sizes if desired; for instance a 14 ft. diameter machine can be used for 12, 14 or 16 ft. by spacing the blocks a little different at the ends. Complete outfit is furnished to make both full and half size blocks, including tamper, striker, and sample wood pallet.

FOR 8x9x16 IN. BLOCKS

	Each
No. 231—Mounted, Silo Block Machine	$21 60
Weight 160 Lbs. Each	
No. 232—Unmounted Silo Block Machine	16.80
Weight 100 Lbs. Each	
No. 233—Extra Face Plates for above machines	$2 16

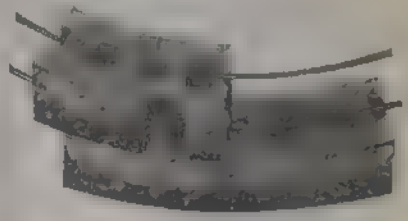


Illustration shows bricks made with this machine

FOR 8x10x16 IN. BLOCKS

	Each
No. 234—Mounted, Silo Block Machine	$22 20
Weight 165 Lbs. Each	

CONCRETE MACHINERY

For Direct Shipment from Near-by Wisconsin Factory

LEADER BLOCK MACHINES

A simple, speedy, practical and adjustable low priced Block Machine. It has a large number of attachments, is easily operated and substantially built. Made of gray iron castings. Consists of a flask or mould and the base. The mould is of the self-truing type having eccentric levers which hold it solid and firm.

The outfit furnished with each machine permits of making practically every kind of block required for any building including gable and joist blocks. It consists of following:

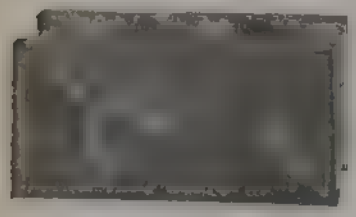
1 Rock Face Plate for whole blocks
1 Rock Face Plate for ½, and two for ¼ size blocks
1 Interchangeable Rock End Plate
1 Pair Core End Plates
1 Pair Dividing Plates for fractional size blocks
1 Steel Striker
1 Pair of Joist Block Plates
1 Double End Tamper
1 Sample Wood Pallet
1 Gable Block Dividing Plate
Plugs for making whole Blocks

This machine makes the popular block 16 in. long and 8 in. high. The necessary plates can be furnished for making blocks either 8, 10 or 12 in. wide. These plates are all interchangeable. The attachments for different size blocks are called flasks and consist of all the necessary plates to change the size for making different widths.

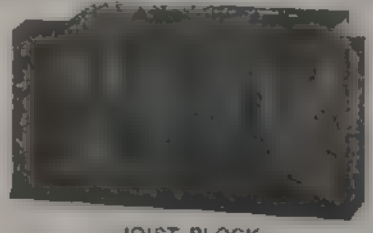
	Nos	FOR 8x8x16 IN. BLOCKS Weight	Each	FOR 8x10x16 IN. BLOCKS Nos.	Weight	Each	FOR 8x12x16 IN. BLOCKS Nos	Weight	Each
Leader Block Machine	201	475	$22.80	202	200	$30 00	203	225	$33 60
Flask Attachments	204	110	7 20	205	103	10.26	206	145	13 50
4 in. Course Block Attachments	207	50	7 20	208	60	7.44	209	70	7 68
4 in. Course Dividing Plates	2010	8	96	2011	9	.96	2012	10	96
Octagon Bay Window Attachments	2013	50	4.08	2014	58	4 32	2015	66	4 96
Circle Bay Window Attachments	2016	35	4 80	2017	40	5 04	2018	45	5 38
Extra Face Plates, any design	2019	18	2 16	2019	18	2 16	2019	18	2 16
Extra End Plates, any design	2020	8	.96	2021	9	1 08	2022	11	1 20
Silo Block Attachment				FOR 8x9x16 IN. BLOCKS			FOR 8x10x16 IN. BLOCKS		
				No.	Weight	Each	No.	Weight	Each
				2023	100	$14 40	2024	110	$15 60

For illustrations of the attachments listed above see pages 823 and 824

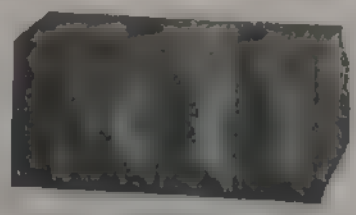
The following blocks can also be made without any extra plates with Regular Outfit furnished with either Leader or Improved Block Machine.



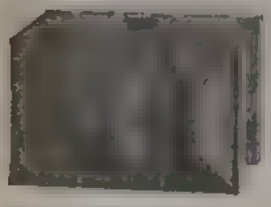
FULL SIZE ROCK



JOIST BLOCK



FULL SIZE BROKEN ASHLER

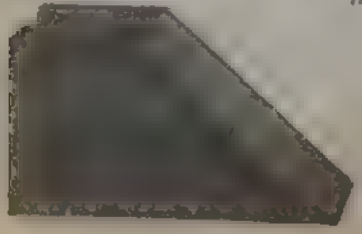


¾ SIZE BROKEN ASHLER

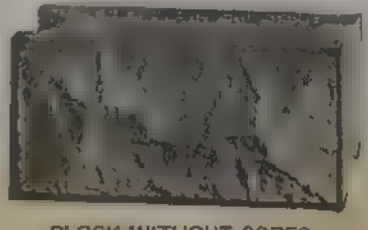
½ SIZE BROKEN ASHLER

¼ SIZE ROCK

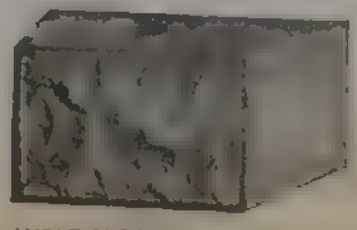
½ SIZE ROCK



JOIST BLOCK



BLOCK WITHOUT CORES



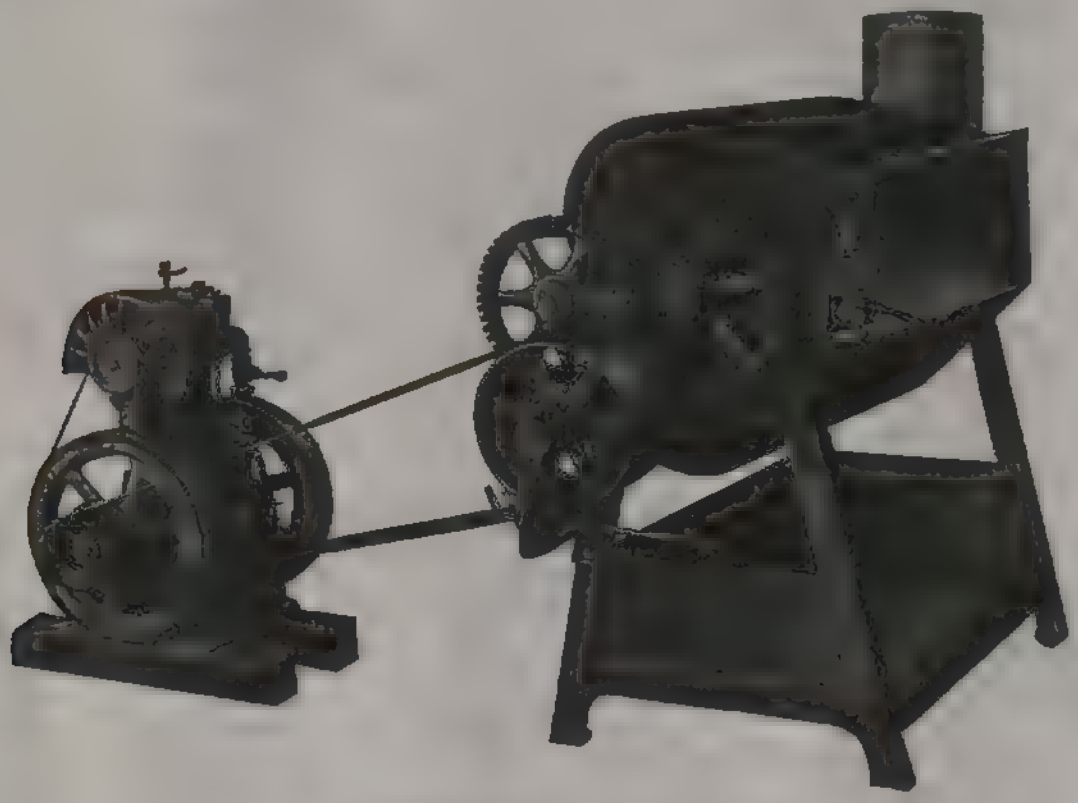
ANGLE BLOCK, INSIDE CORNER

CONCRETE MACHINERY

For Direct Shipment only from Near-by Wisconsin Factory

CONCRETE MIXING MACHINES

We can furnish Concrete Mixing Machines in any Style, Size and Description made. Rotary Drum Mixers (cone shape) can be furnished for the contracting trade in sizes from 7 to 40 cubic feet and with Steam, Gasoline or Electric Power, or without Power. Continuous Mixers can be furnished for those preferring Continuous Type. Special Sidewalk Mixing Machines can be supplied for small crews in Light, Medium, Powerful and Compact Types. Special Catalog sent on request.



STATIONARY POWER MIXING MACHINE

This machine is practical, thorough and rapid, and will be found unexcelled for small block plants, Tile Works and Brick Plants. It is made entirely of iron and steel. The drum is triangular shape, having two cast iron drum heads and cold rolled high carbon sheet steel shell. The drum heads are held together by four heavy rods which are located outside the drum, leaving the inside entirely free from any inside rigging. The door is hinged to the shell and swings inward. It is controlled by a lever allowing same to be opened while machine is running. The wetting device consists of a galvanized tank of about 5 gallons capacity and connected to this is a perforated pipe which runs through a hole in the journal and extends through the center of the drum. A half inch globe valve connects the tank and the perforated pipe and the flow of water can be regulated as desired. The holes in this perforated pipe can be made large or small according to the nature of work machine is intended for, but unless otherwise specified they are made for ordinary work. For extreme wet work large holes are ordinarily used, which wets the material in three or four revolutions of the drum. The gear wheels work smoothly and a loose and tight pulley is provided so that the power can be thrown off and the mixer stopped in any desired position for loading. These machines are furnished without engine or with either 3 H. P. Air Cooled or 2½ H. P. Water Cooled Engine. The engines are guaranteed to be free from any defects in material or workmanship, and to develop the full rated horse power.

SPECIFICATIONS OF MIXER

Length of Drum, In.	36
Circumference, In.	84
Diameter, In.	28
Capacity, Cubic Feet	6
Height Over-all, Feet	4 1/6
Length Over-all, Feet	4 3/4
Speed, Revolutions per Minute	15

	Each
No. 21—Power Mixer without Engine. Weight 800 Lbs. Each	$102 00
No. 21A—Power Mixer with 2½ H. P. Horizontal Water Cooled Engine. Weight 1000 Lbs. Each	244 50
No. 21B—Power Mixer with 3 H. P. Air Cooled Engine. Weight 1000 Lbs. Each	234.00

FINE HAND CARVED IMPORTED CUCKOO CLOCKS

Imported from the Black Forest, (Schwarzwald) Germany.

TRADE MARK

Our genuine Black Forest Cuckoo Clocks are stamped with above trade mark.

The carving of these clocks is done by hand by the natives of the Black Forest, in solid walnut or oak and is especially fine. The figures are accurate and lifelike.

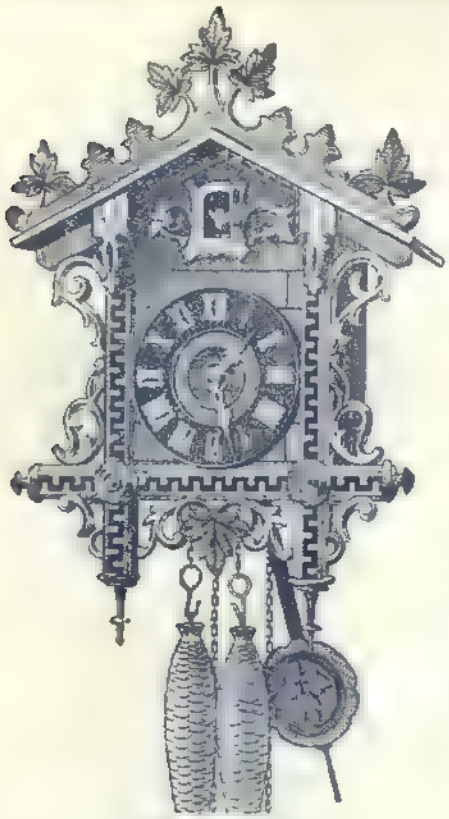
The fronts of these clocks are made of three layers of wood of opposite grain and are set together to prevent warping and cracking.

The movements are made of the best tempered steel and brass, with screw pillars, patent ratchet wheels, new escape wheel, and are well finished and adjusted. The same are guaranteed to be correct timekeepers.

Every clock that leaves our establishment has been run and thoroughly tested here before it is sent out, and is warranted, if properly used, to be a good timekeeper. Should a case crack or split it will be exchanged or repaired without charge.

Each clock is adjusted, regulated and packed in a strong wooden box.

Breakage guaranteed.



CUCKOO CLOCK.

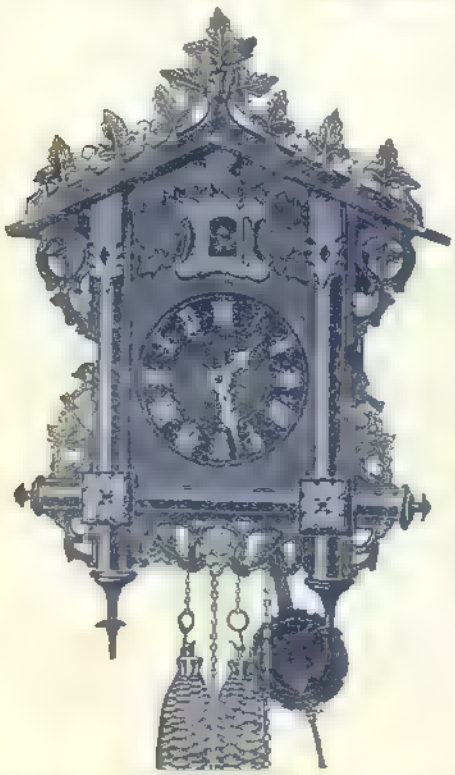
Height, 19 inches; width, 12 inches. Half-hour strike and call. German walnut or oak with inlaid ash, ebony and mahogany ornaments. Small size movement. Front of case made of three layers of wood.

No. 44 Each..... $11 75

CUCKOO CLOCK.

Height, 21 inches; width, 14 inches. Dial, 5½ inches. Half-hour strike and call. Solid walnut or oak case, with inlaid ash, ebony and mahogany ornaments. Large size G. K. movement. Front of case made of three layers of wood.

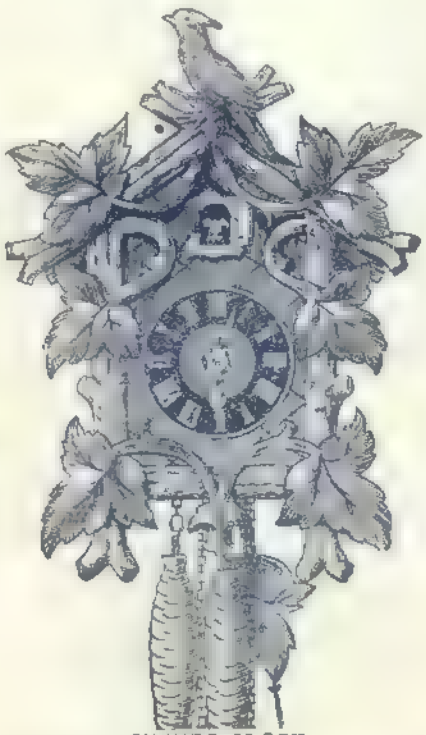
No. 55 Each..... $13 10



CUCKOO CLOCK.

Height, 23½ inches; width, 15½ inches. Dial 6¼ inches. Half-hour strike and call. Solid walnut or oak with cherry ornaments. Large size G. K. movement. Front of case made of three layers of wood.

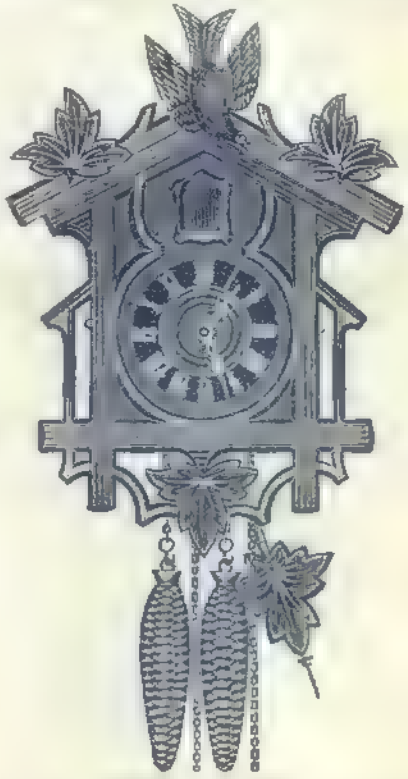
No. 37 Each..... $15 55



CUCKOO CLOCK.

Height, 20 inches; width, 14 inches. Dial, 5½ inches. Half-hour strike and call. Solid walnut or oak. Large size G. K. movement. Front of case made of three layers of wood.

No. 32 Each..... $18.70



CUCKOO CLOCK.

Height, 17 inches; width, 12 inches. Dial, 5¼ inches. Half-hour strike and call. German walnut only. Large size G. K. movement. Front of case made of three layers of wood.

No 68 Each..... $16.00

Fine Hand Carved Imported Cuckoo, and Quail and Cuckoo Clocks

Imported from the Black Forest (Schwarzwald), Germany.

Each Clock is Adjusted, Regulated and Packed in a Strong Wooden Box. Breakage Guaranteed.

Prices Each

CUCKOO CLOCK

Height, 19 inches; width, 14 inches; dial, 5¼ inches. Half-hour strike and call. Solid walnut or oak. Large size G. K. movement. Front of case made of three layers of wood.

No. 33 Each.....$19.35

CUCKOO CLOCKS

Height, 19 inches; width, 14 inches; dial, 5¼ inches. Half-hour strike and call. Solid walnut or oak. Large size G. K. movement. Front of case made of three layers of wood.

No. 107 Each.....$20.00

CUCKOO CLOCK.

Height, 21 inches; width, 15 inches; dial, 5¾ inches. Half hour strike and call. Sond walnut or oak. Large size G. K. movement. Front of case made of three layers of wood.

No. 24 Each.....$23.35

CUCKOO CLOCK.

Height, 20 inches. width, 13½ inches; dial, 5¼ inches. Half-hour strike and call. Solid walnut or oak. Large size G. K. movement. Front of case made of three layers of wood.

No. 42 Each.....$25.35

CUCKOO CLOCK.

Height, 25 inches; width, 16 inches; dial, 6 inches. Solid walnut or oak. Large size G. K. movement. Front of case made of three layers of wood.

No. 84 Each.....$34.00

QUAIL AND CUCKOO CLOCK.

Height, 21 inches; width, 14 inches; dial, 5 inches. Quarter-hour strike and call. Solid walnut only, with inlaid ash, ebony and mahogany ornaments. Three-quarter size G. K. movement Front of case made of three layers of wood.

No. 45 Each.....$26.70

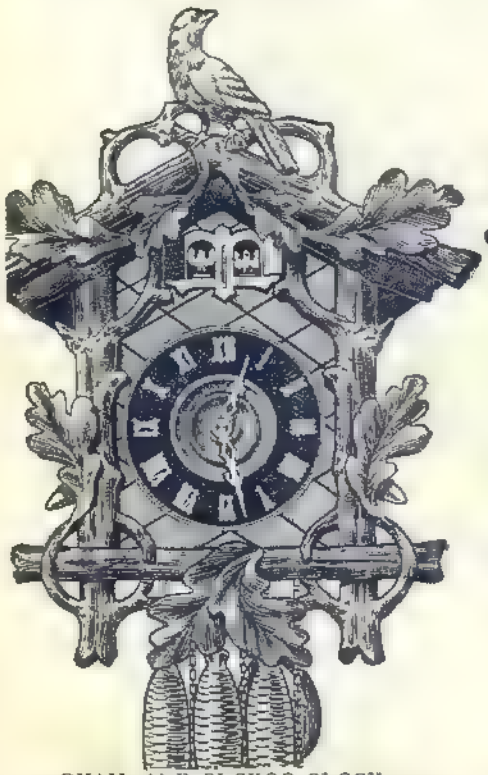
Fine Hand Carved Imported Quail and Cuckoo Clocks

Each Clock is Adjusted, Regulated and Packed in a Strong Wooden Box. Breakage Guaranteed.
Imported from the Black Forest (Schwarzwald), Germany. **Prices Each**

QUAIL AND CUCKOO CLOCK.
Solid walnut only. Height, 20 inches; width 13 inches; dial, 5 inches. Quarter-hour strike and call. Three-quarter size G. K. movement. Front of case made of three layers of wood.
No. 68 Each.....$28.70

QUAIL AND CUCKOO CLOCK.
Solid walnut or oak. Height, 26 inches; width, 17 inches; dial, 6⅝ inches. Quarter-hour strike and call. Large size G. K. movement. Front of case made of three layers of wood.
No. 10 Each.....$45.35

QUAIL AND CUCKOO CLOCK.
Solid walnut or oak with inlaid ash ebony and mahogany ornaments. Height, 25 inches; width, 17 inches; dial, 6⅝ inches. Quarter-hour strike and call. Large size G. K. movement. Front of case made of three layers of wood.
No. 7 Each.....$31.35



QUAIL AND CUCKOO CLOCK.
Solid walnut or oak. Height, 21½ inches; width, 16¼ inches, dial, 6⅝ inches. Quarter-hour strike and call. Large size G. K. movement. Front of case made of three layers of wood.
No. 46 Each.....$36.70

QUAIL AND CUCKOO CLOCK.
Solid walnut or oak. Height, 21 inches; width, 16 inches; dial, 6⅝ inches. Quarter hour strike and call. Large size G. K. movement. Front of case made of three layers of wood.
No. 8 Each.....$35.35

QUAIL AND CUCKOO CLOCK.
Solid walnut or oak. Height, 26 inches; width, 18 inches; dial, 6⅝ inches. Quarter hour strike and call. Large size G. K. movement. Front of case made of three layers of wood.
No. 11 Each.....$48.00

Highest Grade Harmonicas and Jews Harps

FOUR-IN-ONE TREMOLO CONCERT.

16 Double Holes on each Side, 128 Reeds Brass Plates, Nickel Covers, in Four Keys, Length 8¼ inches

No. 9532.....Each $3.15

16 Double Holes on each Side, 64 Reeds, Nickel Covers, Tremolo Tuning.

No. 9528.....Each $1.00

No. 9529.

16 Double Holes on each Side, 64 Reeds, Brass Plates, Nickel Covers, Tremolo Tuning, Length 7½ inches.

No. 9529.....Each $1.20

20 Double Holes on each Side, 80 Reeds, Brass Plates, Nickel Covers, Tremolo Tuning, Length 8¼ inches.

No. 9530.....Each $1.50

Same as No. 9530, but 24 Double Holes on each Side, 96 Reeds. Length 9¾ inches.

No. 9531.....Each $1.80

No. 913

JEWS HARPS.

Illustrations show about 2/3 actual size.

No.		Per Doz
95	Common 2¼ inch Iron Frames	$.50
97	Common 2½ inch Iron Frames	.75
99	Common 3 inch Iron Frames	.85
971	2 inch Heavy Brass Frames File finished	.95
972	2 ¼-inch Heavy Brass Frames, File finished	1.10
973	2½ inch Heavy Brass Frames, File finished	1.20
974	2¾ inch Heavy Brass Frames, File finished	1.50
911	Smith's 2 inch Iron Frames, Tinned, Brass-Tipp'd Tongues	2.30
912	Smith's 2½ inch Iron Frames Tinned White Metal Tipped Tongues	3.20
913	Smith's 2¾ inch Iron Frames, Tinned, White Metal Tipped Tongues	4.00
914	Smith's 3 inch Iron Frames, Tinned, White Metal Tipped Tongues	4.50

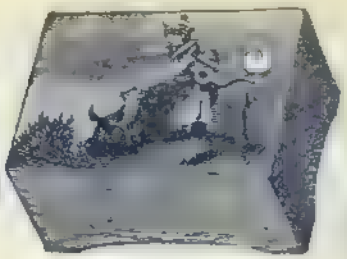
BULL-DOG BELL HARP.

10 Double Holes, 20 Reeds, Brass Reed Plates, Nickel Covers, Bells and Trimmings.

No. 9524.....Each $0.90

MUSICAL BOXES

No. 964

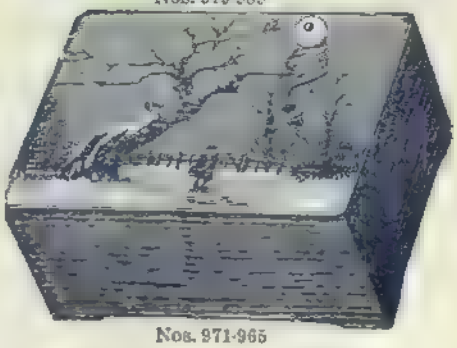


No. 963

Nos. 979-989

Nos. 992-994, Open View.

No. 991



Nos. 971-965

CRANK MOVEMENTS.

No. 958	1 Air, 12 teeth, round nickel case, chromo top	Each	$1.10
No. 959	1 Air, 18 teeth, round nickel case, chromo top	Each	1.40
No. 963	2 Airs, 18 teeth, oblong wood case, chromo top	Each	2.00
No. 964	2 Airs, 36 teeth, large round nickel case, chromo top	Each	2.90
No. 971	3 Airs, 18 teeth, oblong wood case, chromo top	Each	2.40
No. 965	4 Airs, 36 teeth, wood case, chromo top, size 6⅛x4⅜x3⅛	Each	4.00

IMPROVED SPRING MOVEMENTS—WITH ATTACHED KEY.

No. 979	Key Winding, 2 airs, 23 teeth, self-changing, 1⅝-inch cylinder, size 4½x3¼x2½, chromo top	Each	$4.00
No. 986	2 Airs, 1⅝-inch cylinder, self-changing, wood case, chromo top, etc.	Each	5.35
No. 986	2 Airs, 36 teeth, 1¾-inch cylinder, self-changing, chromo top, glass cover, size 4⅝x3⅛x2½	Each	6.90
No. 987	3 Airs 36 teeth, 2⅛-inch cylinder, size 5¼x3⅝x2½, otherwise same as No. 986	Each	8.70
No. 988	4 Airs, 36 teeth, 2⅜-inch cylinder, size 5¼x3⅝x2½, otherwise same as No. 986	Each	11.00
No. 989	6 Airs, 36 teeth, 3-inch cylinder, size 5¼x3⅝x2½, otherwise same as No. 986	Each	14.70
No. 991	4 Airs, 2¾-inch cylinder, self-changing, wood case, Swiss carved, oil painted landscape on panel	Each	16.70
No. 992	8 Airs, 2¾-inch cylinder, self-changing, fancy wood case with metal bound top	Each	13.35
No. 993	4 Airs, 2¾-inch cylinder, self-changing, fancy wood case, with metal bound top	Each	15.35
No. 994	6 Airs, 3-inch cylinder, self-changing, fancy wood case, with metal bound top	Each	20.00

Nos 9318-9319

Imitation Rosewood Cases, Decalcomanie Ornamented Top, Interior Glass Covers, Spring Lever Movements, Tune Dial, Ratchet Lever Winding.

No. 9250	6 Airs, 3¼-inch cylinder	Each	$21.70
No. 9254	8 Airs, 4⅛-inch cylinder	Each	26.35
No. 9256	10 Airs 6½-inch cylinder	Each	33.35
No. 9258	12 Airs 8 -inch cylinder	Each	44.70

Cases with Rosewood Tops, Variegated Wood Inlaying, Interior Glass Covers, Nickel Plated Spring Lever Movements, Outside Crank Winding.

EACH WITH TUNE DIAL AND SAFETY CHECK.

No. 9318	12 Airs 4-inch cylinder, tune skipper and speed regulator, case 14x27 inches	Each	$34.00
No. 9319	12 Airs 12-inch cylinder, with Zither attachment tune skipper and speed regulator, case 11x27 inches	Each	87.20

A Zither-like tone is attained through the medium of the Zither attachment, which is an adjustable bar that may be detached at will.

THE ARION MUSIC BOX.

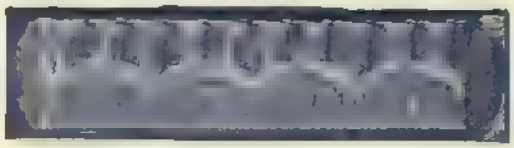
No. 9300

This instrument is particularly well made, and considering its size, its tone is powerful. As a premium it is an ideal one as more likely to please can be named than the Arion Music Box. It is a self playing key winding instrument. The case is made of natural white wood, and is handsomely finished, and has a chromo top. Size 8x5½x4 inches.

No. 9300 Price, including six tune sheets . . . . . Each $13.35

HARMONICAS

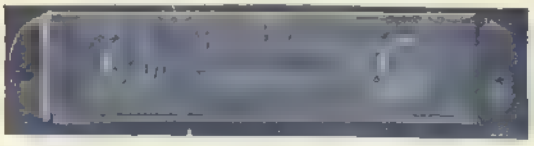
PRICES PER DOZEN



No. 9502

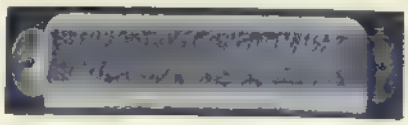
No. 9501 Little Diamond. 8 single holes, zinc reed plate, nickel covers. In pasteboard boxes Per doz ...$0.85
No. 9502 Improved Pipe Organ. 10 single holes 8 reeds, white metal reed plate, nickel covers. Per doz $1.20

No. 9503 Princess Harp. 12 single holes, 10 reeds, white metal reed plate, fancy nickel covers. Per doz.....$1.30



No. 9504 The Boss Richter. 10 single holes 20 reeds, white metal reed plates, nickel covers, assorted keys. Per doz $1.75

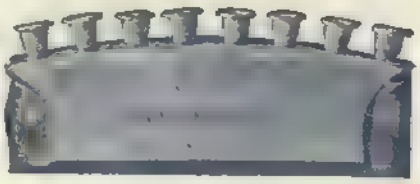
No. 9505 The Dutch Band Harp. 10 single holes, 20 reeds, white metal reed plate, nickel curved cover, assorted keys. Per doz. $2.25



No. 9506 The Pocket Harmonica. Miniature. 3⅛ inches long, 10 single holes, 20 reeds, nickel cover, superior quality, assorted keys. Per doz.....$2 40

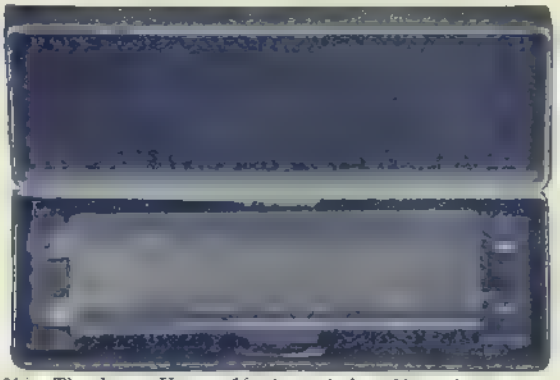
No. 9507 The Marvelous. 10 single holes, 20 reeds, brass reed plates, nickel covers, assorted keys. Per doz.....$2.25

No 9508 Gloriosa Harp Length 4¼ inches 14 double holes 14 reeds, brass plates, nickel covers. Per doz.....$2.70

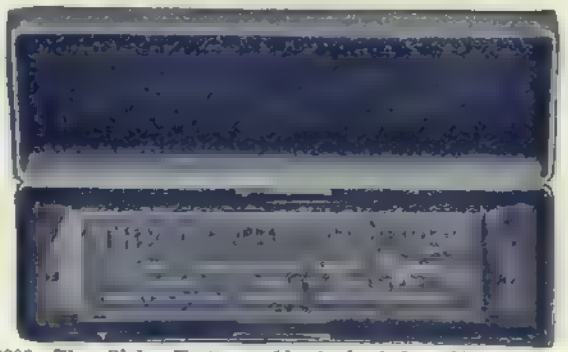


No. 9509 The Meteor. Length 3⅛ inches. 10 single holes, 20 reeds, nickeled reed plates, nickel covers and small bugles. Per doz. $3.15

No. 9510 The Extra Post. 10 single holes, 20 reeds, white nickeled plates, covers lithographed in colors. Per doz $3.15



No 9380 The Navy Harp. 10 single holes 20 reeds, brass plates, heavy curved brass covers, open back, nickel plated steel bronze reeds, Asst. keys. Per doz..... $5.05



No. 9382 The Globe Trotter. 10 single holes, 20 reeds, brass plates, nickel covers, Asst. keys. Per doz.....$5.15

No. 9521 Chicago Cubs. 10 single holes, 20 superior quality reeds, brass plates, substantial nickel covers, assorted keys in hinged case. Per doz.....$4.90

We purchased from the Manufacturers gross quantities of Harmonicas, which we quote in one dozen lots at the gross price, thus offering the above at lowest possible prices These goods should be in your stock—sell fast. Order one dozen now and more later

HORSESHOE NAILS

City Head

Ajax

Nos.	4	3	6	7	8	9	*10
City head, per lb.	$...	...		. .		.	.
Regular head, per lb.	...	...	...	...	...	...	...

Regular Head

Capewell

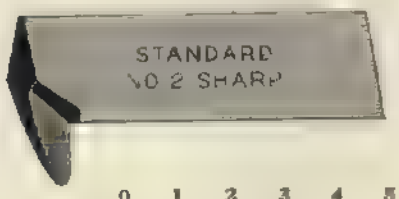
Nos.	3	4	4½	5	6	7	9	10
City head, per lb.	$0.75	.35	.30	.22	.19	.18	.17	.16
Regular head, per lb.	.75	.35	.30	.22	.19	.18	.17	.16

*Not carried in stock.

Five pounds in a carton, 5 cartons in a box

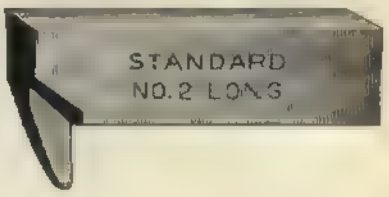
TOE CALKS

STANDARD LONG SHARP



Nos.	0	1	2	3	4	5	6	7
Length, in.	1¾	2⅛	2⅜	2⅝	2⅞	3⅛	3⅜	3⅝
Per pound	$	..	...	...	...	...	...	...

STANDARD LONG BLUNT



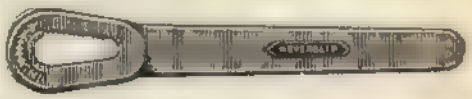
Nos.	0	1	2	3	4	5	6	7
Length, in.	1¼	1¾	2	2¼	2½	2¾	3	3¼
Per pound	$.	.	.	.	.	.	...	...

NEVERSLIP RED TIP CALKS

No. 4. Size in	⅜	½	⅝	¾	⅞	1
Per 100	$2.70	2.70	2.90	2.90	3.20	3.30

These calks are adapted for all round slippery conditions

NEVERSLIP RED TIP WRENCHES



Regular, removes all sizes, each .. . $0.70

NEVERSLIP RED TIP TAPS

Neverslip hand taps are for cutting the threads in the calk holes by hand, and are used with an ordinary monkey wrench.

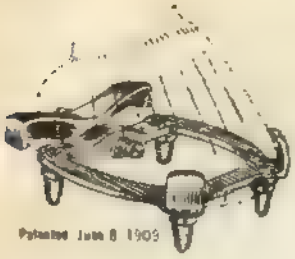
Stub Tap

Neverslip tapper, or machine taps, have ⅝ in. round shanks, and are for use in the neverslip tapper, or in tapping holes by power

Taps, Hand Taps, Stub Taps, Tapper or Machine Taps, all sizes .. . . . . each, $0.35

Sizes, in.	⅜	½	⅝	¾	⅞
Thread	18	16	14	12	12

Neverslip stub taps are for use in repairing any damage to the threads in calk holes without removing the shoe from the horse's foot, if from carelessness or neglect calks have become loose or dropped out



EMERGENCY HORSESHOES

RED TIP

With No. 4 Red Tip Calks

These shoes are made of the best quality of drop forged steel, practically unbreakable and will last for years. Will not come off and will fit any shoe.

For shoes Nos. 1 to 5 inclusive ..per set, $5 00
For shoes Nos. 6 and 7 ..per set, 6.00

NEVERSLIP HORSESHOES

These shoes are made of selected stock, Bessemer refined, and are creased to prevent straw from balling in foot

Size	Outside Length	Outside Width	Weight Front Shoe.	Largest Calk	No. of Fronts in a Keg
*0	5 in.	4¼ in.	11 oz.	⅜ in.	145
1	5¼ in.	4⅜ in.	12 oz.	⅜ in.	133
2	5⅝ in.	4¾ in.	15 oz.	7/16 in.	107
3	5⅞ in.	5⅛ in.	17 oz.	7/16 in.	89
4	6⅛ in.	5¼ in.	21 oz.	½ in.	73
5	6⅜ in.	5⅜ in.	29 oz.	9/16 in.	55
6	7¼ in.	6 in.	32 oz.	⅝ in.	50
7	7⅛ in.	6⅛ in.	36 oz.	⅝ in.	44

B Pattern Drilled Iron Shoes. No. 2 and larger, per pound .....$.

Nos. 0 and 1, 25 cents per 100 lbs. extra.

B Pattern Iron Shoes Calked with No. 4 Red Tip Neverslip Calks

Sizes, Nos...	0	1	2	3	4	5	6	7
Per set. .$	.	....	....	....	....	....	....	....

*Not carried in stock.

Made of the highest grade of Iron or steel. An excellent shoe for use on medium weight horses

Size	Outside Length	Outside Width	Weight Front Shoe	Largest Calk	No. of Fronts in a Keg
*0	5 in.	4¼ in.	11 oz.	⅜ in.	145
1	5¼ in.	4⅜ in.	12 oz.	⅜ in.	133
2	5⅝ in.	4¾ in.	15 oz.	7/16 in.	107
3	5⅞ in.	5⅛ in.	17 oz.	7/16 in.	89
4	6⅛ in.	5½ in.	21 oz.	½ in.	73
5	6⅜ in.	5⅞ in.	29 oz.	9/16 in.	55
6	7¼ in.	6 in.	32 oz.	⅝ in.	50
7	7⅞ in.	6⅛ in.	36 oz.	⅝ in.	44
8	8¼ in.	6⅝ in.	42 oz.	⅝ in.	38

Drilled Steel Shoes. No. 2 and larger per pound $

Steel Shoes Calked with No. 4 Red Tip Neverslip Calks

Size Nos.	0	1	2	3	4	5	6
Per pair $							

HORSESHOES

LIGHT FRONT

Juniata Extra Swaged Steel

Size Nos.	0	1	2	3	4	5	6	7
Weight, ozs.	10	13	15½	18½	22	25½	30	39
No. in keg.....	160	123	103	86	73	63	53	41
Per keg .....$.....								

Cincinnati Iron, Light Front

Size Nos.	0	1	2	3	4	5	6	7	8
Weight, ozs.	12	14	17	21	25	30	36	42	46
No. in keg....	133	114	94	76	64	53	44	38	35
Per keg								.$	

100 pounds in a keg

LIGHT HIND

Juniata Extra Swaged Steel

Size Nos.	0	1	2	3	4	5	6	7
Weight, ozs.	9	10	12½	15½	19	22½	26½	31
No. in keg.....	178	160	128	103	84	72	60	51
Per keg							$	

Cincinnati Iron, Medium Hind

Size Nos. .	0	1	2	3	4	5	6	7	8
Weight, ozs.	10	14	16	20	24	29	34	39	45
No. in keg	152	114	100	80	67	55	47	41	35
Per keg .								.$	

100 pounds in a keg

HORSESHOES

LIGHT DRIVING FRONT

Juniata Steel

Size Nos.	0	1	2	3	4	5
Weight, ozs.	9	10½	13	16	20	23
No. in keg	178	152	123	100	80	70
Per keg						

LIGHT DRIVING HIND

Juniata Steel

Size Nos.	0	1	2	3	4	5
Weight, ozs.	8	9	10	12	15	19
No. in keg	200	178	160	133	107	84
Per keg					$.	

EXTRA LIGHT FRONT

Cincinnati Iron

Size Nos.	0	1	2	3	4	5	6	7
Weight, ozs.	11	13	15½	18½	22	25½	30	36
No. in keg	145	123	103	86	73	63	53	44
Per keg							$	

EXTRA LIGHT HIND

Cincinnati Iron

Size Nos.	0	1	2	3	4	5	6	7
Weight, ozs.	9	10½	13	16	19½	23	27	32
No. in keg	177	152	123	100	82	70	59	50
Per keg							$	

SNOW OR ROADSTER

Front, Cincinnati Iron

Size Nos.	0	1	2	3	4	5	6	7
Weight, ozs.	10	12	14	18	22	28	34	40
No. in keg	160	133	114	90	73	58	47	40
Per keg							$	

Hind, Cincinnati Iron

Size Nos.	0	1	2	3	4	5	6	7
Weight, ozs.	9	10	12	15	19	25	29	33
No. in keg	177	160	133	107	85	64	55	48
Per keg							$	

MULE SHOES

Juniata Light Steel

Size Nos.	00	0	1	2	3	4	*5	*6
Weight, ozs.	8	9	10	12	15	20	23	30
No. in keg	200	178	160	133	107	80	70	53
Per keg							$	

Cincinnati Iron

Size Nos.	00	0	1	2	3	4	*5	*6
Weight, ozs.	8	9	12	14	18	22	27	31
No. in keg	200	178	133	114	89	73	59	51
Per keg							$	

*Not carried in stock

100 pounds in a keg

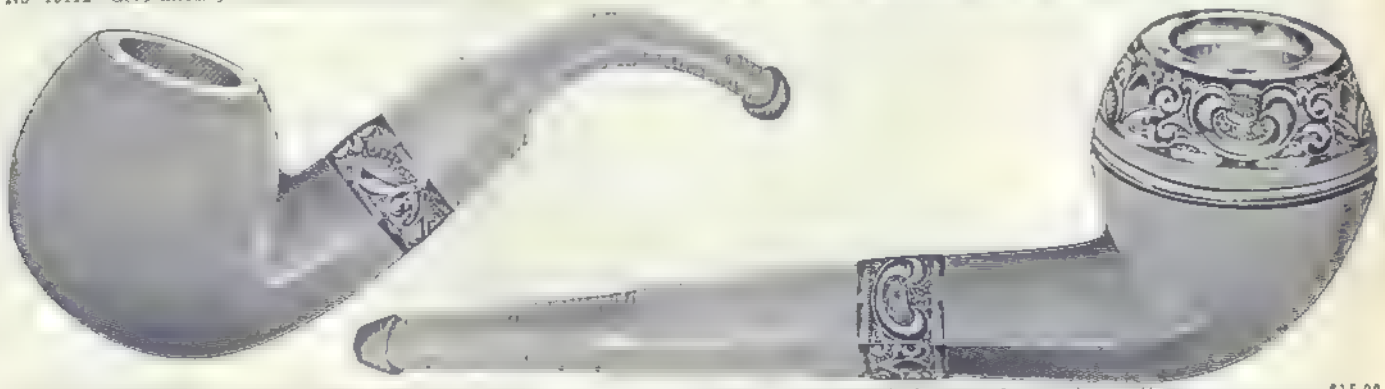
FINEST QUALITY GENUINE MEERSCHAUM PIPES, CIGAR AND CIGARETTE HOLDERS PRICES EACH.

Fine Selected Genuine Amber Stems. Put up in Fine Plush Lined Leather and Chamois Cases. Illustrations are Exact Size.

CIGAR HOLDER.
All fine amber, gold filled mounting
No 10113 .. .... $4.50

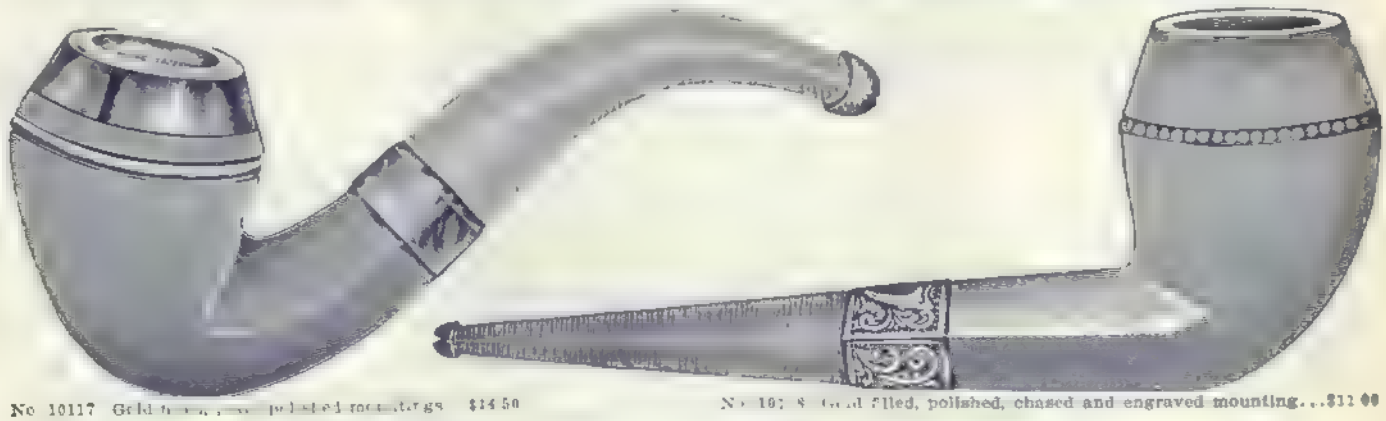
No 10112 Gold filled, polished, chased mounting $9.50

No 10114 All fine selected amber meerschaum bowl $18.00



No 10115 Gold filled, polished, chased mounting . $12.00

No 10116 Gold filled polished, chased mountings . $15.00



No 10117 Gold filled, polished mountings $14.50

No 10118 Gold filled, polished, chased and engraved mounting...$12.00

No 10119 CIGAR HOLDER $1.25

No 10120 All fine amber CIGAR HOLDER, gold filled mounting $2.25

No. 10121 Polished, gold filled mounting, detachable stem $12.00

No. 10122 Gold filled, Roman finish raised design mounting... .$13.00

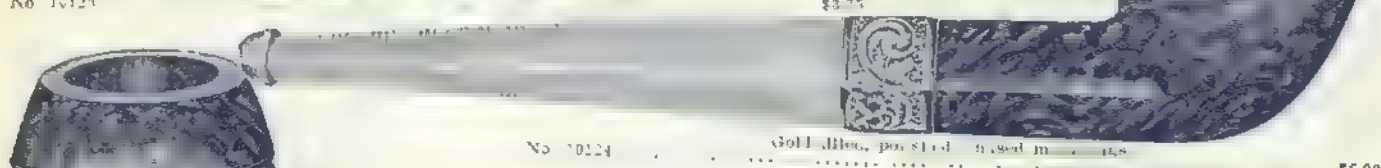
FINEST QUALITY GENUINE FRENCH BRIAR PIPES

Fine Selected Amber Stems

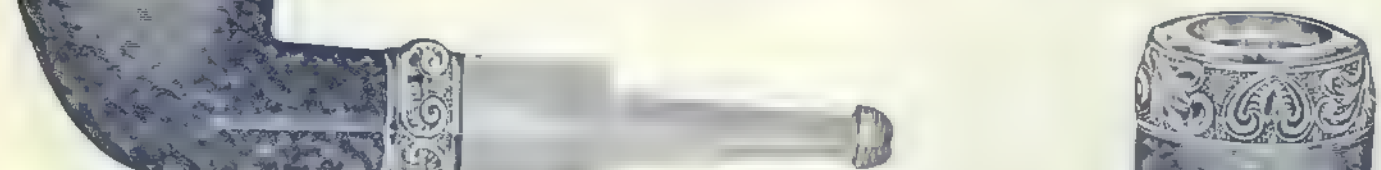
Put up in fine plush lined leather cases. Illustrations are exact size.

PRICES EACH

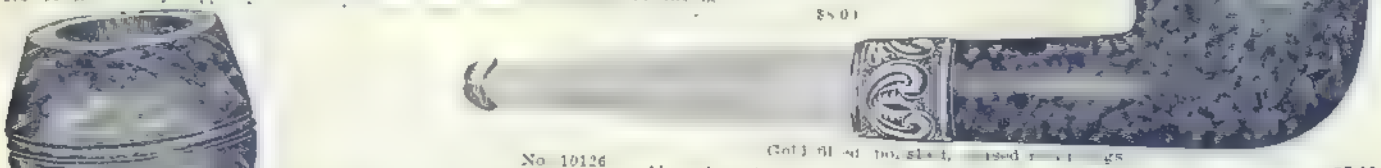
No. 10123 — Gold lined, plain chased mounting — $3.25



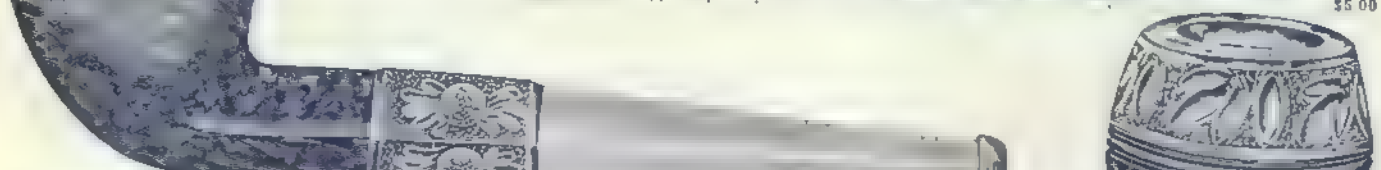
No. 10124 — Gold filled, polished, chased mountings — $6.00



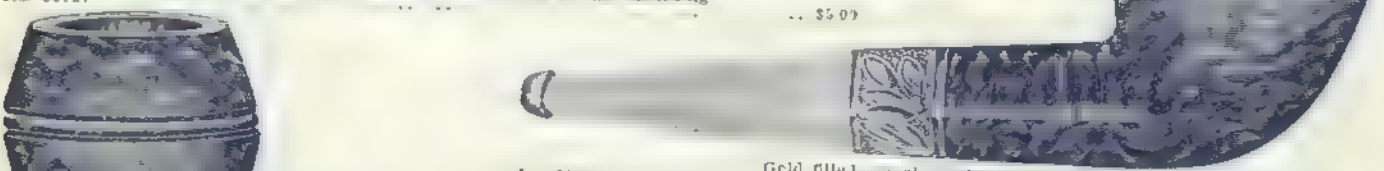
No. 10125 — Gold filled, polished, chased mountings — $8.00



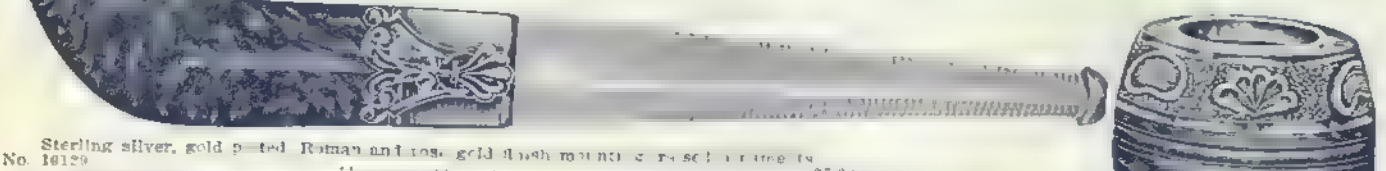
No. 10126 — Gold filled, polished, chased mountings — $5.00



No. 10127 — 14k gold plate, Roman finish, heavy raised design mounting — $5.00



No. 10128 — Gold filled, plain chased mountings — $4.00



No. 10129 — Sterling silver, gold plated Roman and rose gold finish mountings, raised ornaments — $7.00

No. 10130 — Roman and rose gold finish mountings, raised ornaments — $7.00

No. 10131 — 14k gold plate, Roman finish mountings, raised ornaments — $8.00

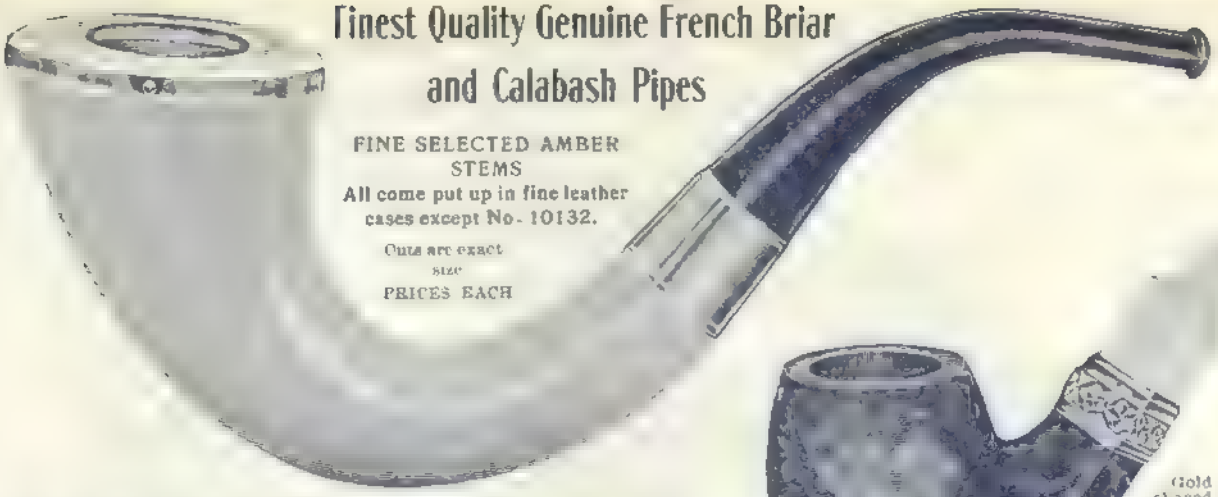
Finest Quality Genuine French Briar and Calabash Pipes

FINE SELECTED AMBER STEMS

All come put up in fine leather cases except No. 10132.

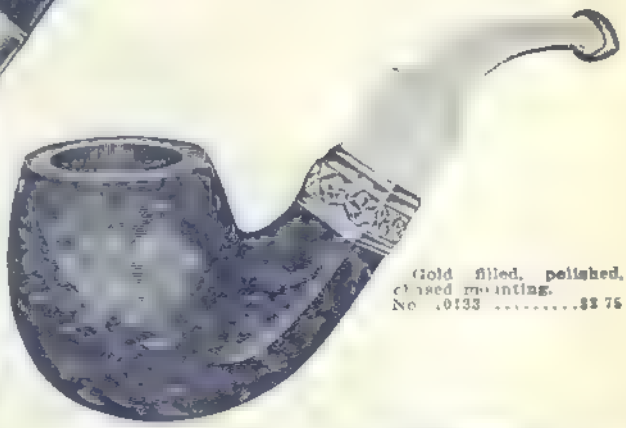
Cuts are exact size

PRICES EACH



Finest selected genuine Calabash Vienna meerschaum [illegible] sterling silver mountings, black vulcanized rubber stem

No. 01 ..... $8.00

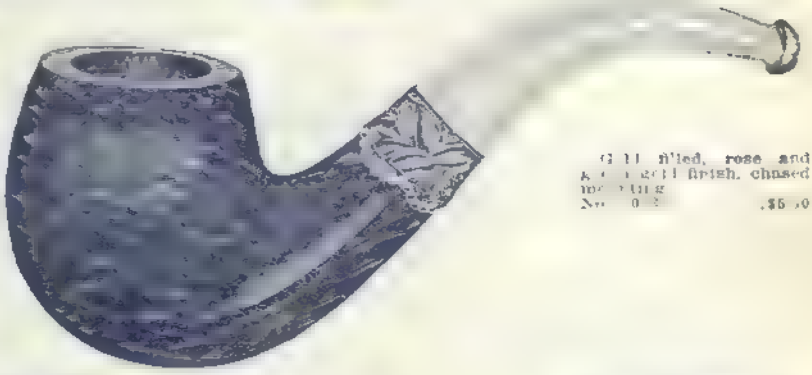


Gold filled, polished, chased mounting.

No. 10133 ..... $3 75

Gold filled, polished, chased mounting

No. 10134 ..... $4 0

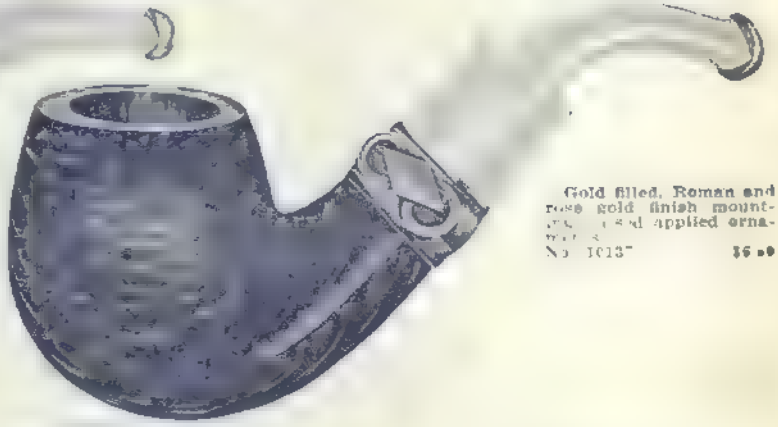


Gold filled, rose and [illegible] finish, chased mounting

No. 0 [illegible] ..... $5 .0

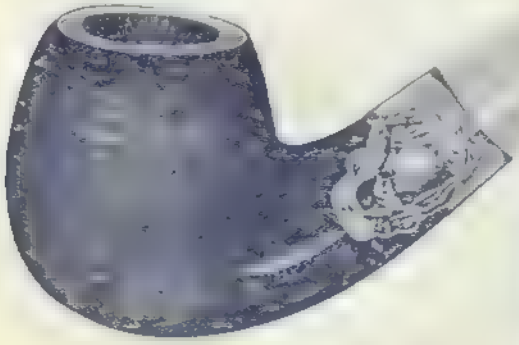
Gold filled, polished, chased mountings

No. 10136 ..... $5 00



Gold filled, Roman and rose gold finish mountings, [illegible] and applied ornaments

No. 10137 ..... $6 00



12k gold plate, Roman finish mounting, raised embossed ornaments.

No. 10138 ..... $3.00

Gold filled, plain polished mountings.

No. 10139 ..... $6 00

NATIONAL X-RAY GLASS REFLECTORS

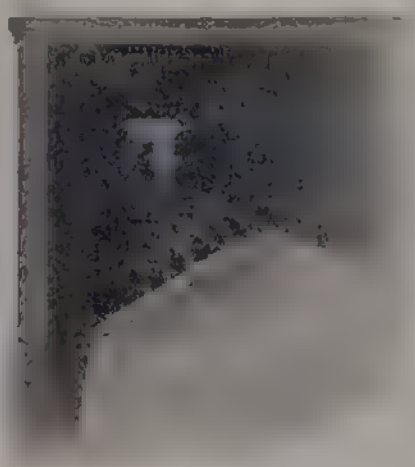
For efficiency in directing light, and for durability, these reflectors have no equal. The glass blanks are one piece, blown in steel molds, annealed and fire glazed, to obtain maximum strength and a perfect surface. All are Green Enameled outside with a pure Silver Plating under the enamel next to the glass, producing the most efficient reflecting surface known. The different styles are designed for the special purpose required. The vertical and spiral corrugations eliminate streaks and shadows.

THE BEEHIVE

The Beehive Reflector is specially designed for illuminating large rooms with high ceilings. Factories, Shops of all kinds, Gymnasiums, Armories, Indoor Handball and Tennis Courts, Press Rooms, Power Houses, etc. all come under this classification. Takes a 3¼ in. Special Shade Holder, which is furnished with each reflector.

	Each
No. 785—Diameter 10½ in., Height 11¾ in. For 100, 150 or 250 Watt Mazda Lamps	$4.50

Four in Standard Package
Weight 50 Lbs. per Package



WINDOW REFLECTORS

THE SCOOP

This Reflector effectually meets the demand for a reflector of the highest efficiency for the lighting of a large class of show windows of the average size. Takes a 2¼ in. Shade Holder. Holders not furnished with this Reflector.

	Each
No. 777—Width 9 in., Depth, front to back, 7½ in., Height including neck 7⅝ in.; For 40 or 60 Watt Mazda Lamps	$3.00

15 in Standard Package
Weight 65 Lbs. per Package

THE HELMET

The Helmet Reflector is intended for high and large windows; is a genuine searchlight and very concentrating; is also extensively used and perfectly adapted for use over skylights and for the lighting of factories, press rooms and other interiors where great concentration is required. Takes 3¼ in. Special Shade Holder, which is furnished with each Reflector.

	Each
No. 755—Diameter 12 in., Height 11⅝ in.; For 60, 100 or 150 Watt Mazda Lamps	$5.00

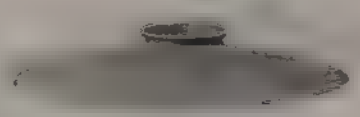
Four in Standard Package
Weight 50 Lbs. per Package

GLASS CONE REFLECTORS

Green Cased; for 2¼ in. Holder

	Per Dozen
No. 62-7—Height 5 in., Diameter 7 in.	$2.88
Three Dozen in a Package; Weight 33 Lbs. per Package	
No. 62-10—Height 5 in., Diameter 10 in.	3.38
One Dozen in a Package; Weight 20 Lbs. per Package	

FLAT OPAL SHADES



For 2¼ in. Holder

	Per Dozen
No. 60-8—Diameter 8 in.	$1.63
Eight Dozen in a Package; Weight about 40 Lbs. per Package	
No. 60-10—Diameter 10 in.	2.13
Four Dozen in a Package; Weight about 40 Lbs. per Package	

HOLOPHANE AND IMITATION HOLOPHANE REFLECTORS

HIGH EFFICIENCY HOLOPHANE REFLECTORS

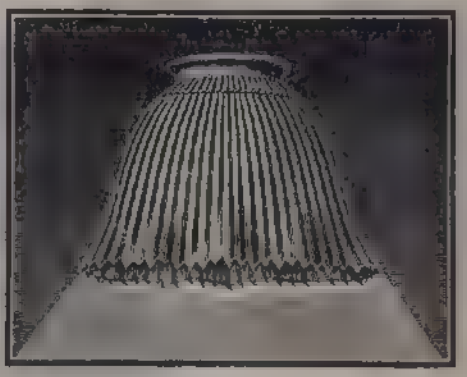
Extensive Type

CLEAR GLASS

Nos.	E25	E40	E60	E100	E150	E250
Watts Mazda Lamps	25	40	60	100	150	250
Size of Holder, In.	2¼	2¼	2¼	2¼	3¼	3¼
Diameter, In.	5⅞	6¼	7	8	10⅝	12
Height, In.	3⅞	4½	6	5⅝	6½	7¾
Standard Quantity	30	30	30	30	20	12
No in Package	20	10	10	10	10	6
Weight per Package, Lbs	28	19	23	29	54	51
Each	$1 31	1.45	1.56	2.10	4.85	5.36

SATIN FINISH GLASS

Nos.	SE25	SE40	SE60	SE100
Watts, Mazda Lamps	25	40	60	100
Size of Holder, In.	2¼	2¼	2¼	3¼
Diameter, In.	5⅞	6¼	7	8
Height, In.	3⅞	4½	5	5⅝
Standard Quantity	40	30	30	30
No in Package	30	10	10	10
Weight per Package, Lbs	28	19	23	29
Each	$1 45	1.60	1.72	2 31

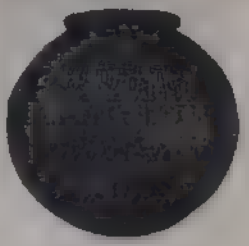


IMITATION HOLOPHANE REFLECTORS

CLEAR GLASS

Nos.	4058C	4057C	4043C	4059C
Watts, Mazda Lamps	25 or 40	40 or 60	60 or 100	150 or 250
Size of Holder, In.	2¼	2¼	2¼	3¼
Diameter In	6½	6¾	7¼	11
Height, In.	4⅞	5	5¾	7⅞
Standard Package, Doz.	4	4	2½	½
Weight per Package, Lbs.	96	105	90	90
Each	$0 85	90	1 25	3 25

HOLOPHANE GLASS ONE-PIECE BALLS



Each

No. 3155—For 40 Watt Mazda or Tungsten Lamps; Diameter 6½ in.; For 3¼ in. Holder $2.54

20 in Standard Package

Weight 35 Lbs per Package

MAGIAN REFLECTORS

GAS SHADE

Per Dozen

No. 431A—Diameter 7½ in., Height 4 in.; For 4 in. Holder $9 60

No. 4060C—For use with Inverted Gas; Diameter 7 in., Width 4¼ in.; For 3⅜ in. Holder; Top is re-inforced with a Metal Ring 10.00

Four Dozen in a Package

Weight 12 Lbs. per Dozen

Per Dozen

No. 4002C—For 25 Watt Lamps; Diameter 5¼ in., Height 3⅞ in., For 2¼ in. Holder $6.60

Ten Dozen in a Package

Weight 11 Lbs. per Dozen

Per Dozen

No. 4017C—For 25 or 40 Watt Lamps; Diameter 5¼ in., Height 4⅛ in.; For 2¼ in. Holder.. . . . . $9.90

Six Dozen in a Standard Package

Weight 16½ Lbs. per Dozen

No. 1341

WHITE LUCIDA GAS REFLECTORS

Per Dozen

No. 1341—Diameter 7 in., Height 4¼ in.; For 2¼ in. Holder..$9.00

Six Dozen in a Package; Weight 24 Lbs. per Dozen

No. 931—Diameter 5⅝ in., Height 4½ in.; For 2¼ in. Holder..$7.20

Eight Dozen in a Package; Weight 16 Lbs. per Dozen

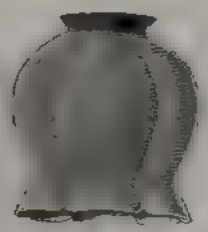
No. 931

GLASS ELECTRIC SHADES, BALLS AND BOWLS

Per Dozen
No. 1520—Opal Mission Bells; Diameter 6 in.; For 2¼ in. Holder $2 25
Ten Dozen in a Package
Weight 10 Lbs. per Dozen

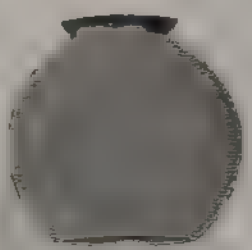
Per Dozen
No. 0342—Round Bell Shaped Shades; Crystal Roughed Inside; Diameter 4¼ in., Height 4⅛ in.; For 2¼ in. Holder.....$1.88
Eight Dozen in a Package
Weight 12 Lbs. per Dozen

Round Bell Shaped Shades; Diameter 5 in., Height 6 in.; For 2¼ in. Holder.
Per Dozen
No. 6101-CRI—Crystal Roughed Inside .....$ 5.00
No. 6101A—Ambril 11.25
Four Dozen in a Package
Weight 18 Lbs. per Dozen



Per Dozen
No. 292 CRI—Crystal Roughed Inside; Diameter 4½ in., Height 4¼ in.; For 2¼ in. Holder..$3.38
Five Dozen in a Package
Weight 14 Lbs. per Dozen

Diameter 3½ in., Height 5¼ in.; For 2¼ in. Holder
Per Dozen
No. 6099-CRI—Crystal Roughed Inside .....$ 4.38
No. 6099 A—Ambril 10.00
Six Dozen in a Package
Weight 12 Lbs. per Dozen



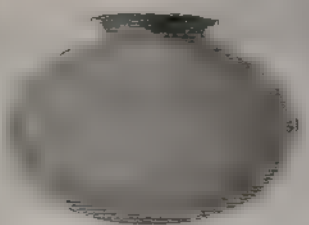
Per Dozen
No. 173-CRI—Crystal Roughed Inside; Diameter 4½ in., Height 4¼ in.; For 2¼ in. Holder..$1.88
Five Dozen in a Package
Weight 12 Lbs. per Dozen

BALLS

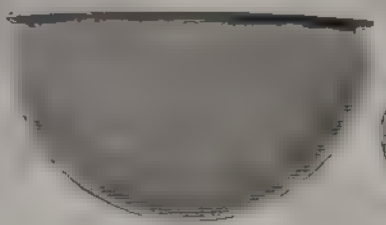
Crystal Roughed Inside				Alabaster Roughed Outside			
Nos.	Diam. In.	Size of Holder	Per Dozen	Nos.	Diam. In.	Size of Holder	Per Dozen
976-CRI	6	3¼ in.	$2.50	976-ARO	6	3¼ in.	$6.25
977-CRI	7	3¼ in.	3.38	977-ARO	7	3¼ in.	6 88
978-CRI	8	4 in.	4.38	978-ARO	8	4 in.	8.13
971D-CRI	10	4 in.	9.38	9710-ARO	10	4 in.	17.50
*9712-CRI	12	5, 6, 7 or 8 in.	15.00	*9712-ARO	12	5, 6, 7 or 8 in	23.75
*9716-CRI	16	6 in	60 00	*9716 ARO	16	6 in	32 50

Average Weight 30 Lbs. per Dozen

BALL
Per Dozen
No. 180-CRI—Square Ball, Crystal Roughed Inside; Diameter 7 in., Height 6⅝ in.; For 3¼ in. Holder $8 75
Two Dozen in a Package
Weight 35 Lbs. per Dozen



SQUAT BALL
Diameter 7 in.; For 3¼ in. Holder
Per Dozen
No. 6041-CRI—Crystal Roughed Inside $5 00
No. 6041-ARO—Alabaster Roughed Outside..... 8.13
Two Dozen in a Package
Weight 34 Lbs. per Dozen



CEILING BOWL
Diameter 10 in., Height 5 in.; For 10 in. Holder
Per Dozen
No. 6154-CRI—Crystal Roughed Inside $15.00
No. 6154-CRO—Crystal Roughed Outside 15 00
*No. 6154-ARO—Alabaster Roughed Outside 23.75
One Dozen in a Package
Weight 59 Lbs. per Dozen

CEILING BOWL
Diameter 12 in.; Height 5⅝ in.; For 10 in. Holder
Per Dozen
No. 210-CRI—Crystal Roughed Inside $13.75
No. 210-ARO—Alabaster Roughed Outside 17 50
Two-Thirds Dozen in a Package
Weight 57 Lbs. per Dozen

*Not carried in stock; Can furnish only on Special Order

Note—Weights given include Packing

PORTABLE ACETYLENE LIGHTS

The old type of Oil Lamps are being replaced by the **Simple, Self-Generating Milburn Acetylene Lights.** The light closely resembles sunlight. **It is fifteen times more Powerful, Penetrating and Diffusive** for the size of the flame than any existing light. The apparatus consists of three parts—an Outer Tank holding Water, an Inner Receptacle containing the Carbide, and a Burner Stand Pipe. The lights are Small and Compact in size, being less than half the weight of Oil Lamps of equal power. Any pipe connection can be instantly made without the turn of a screw or joint, as all fittings telescope into the light and are "Water Sealed." The light is made by water and burns upwards of 50 per cent air, and requires not the slightest attention during use. It is **Smokeless, Incandescent, Absolutely Storm Proof** and unaffected by **Vibration, Wind or Weather.**

The best size of Carbide to use in these Lights is the Egg or ½x2 in.

ENTIRE PAGE F. O. B. MINNEAPOLIS

TWIN WRECKER

Milburn Lights will not freeze if Calcium of Chloride is used in the following proportions

Lbs to the Gal of Water		Degrees below zero
2½	for	.. 3½
3	for	... 4
3½	for	.. 4½
4	for	. 20
4½	for	.. 29
5	for	. 41
5½	for	. 54

The cost is about $1.00 per 100 Lbs. Same is procurable of most manufacturing chemists.

The **Twin Wrecker** and **Wrecker Lights** are especially adapted for Wrecking Cars, Steam Shovels, Dredges, Cranes, etc.

WRECKER

*Each

No. 4W—12,000 Candle Power; Lights 1500 Feet; Size of Tank 12x24x36 in.; Equipped with **Twin Cylinders,** and Two Burners and Reflectors each Burner giving 12,000 Candle Power also 25 feet of Armored Hose, and Water Tight Cover. Used for lighting **Steam Shovels,** etc., or where several smaller lights are required, or where a single light is required to burn longer than 12 hours; Charge of Carbide 32 Lbs.: One Cylinder can be charged while light is burning $280.00

Weight, Empty, 200 Lbs.; Weight, Packed for Shipping, 250 Lbs

*Each

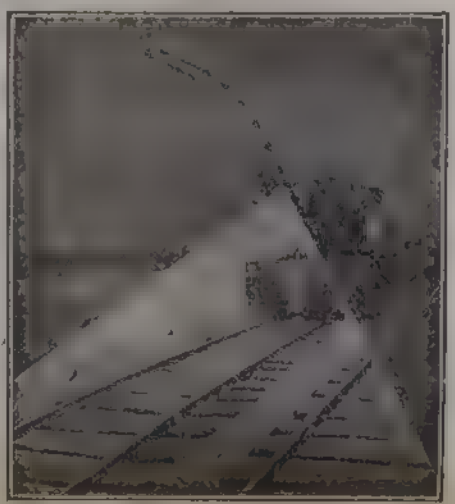
No. 3W—5000 to 12,000 Candle Power; Lights 1500 Feet; Size of Tank 12x12x36 in.; Equipped with **Single Cylinder,** Storm Proof Burner on Swing Joint, 15 in. all Aluminum Non-tarnishing Reflector, and 25 feet of Armored Hose with connections. Made to withstand hard usage; the vibration and movement of Cranes, Steam Shovels and Dredges Several smaller burners can be supplied from this light, capacity up to 9 hours; Charge of Carbide 16 Lbs.....$196 00

Weight Empty 100 Lbs., Weight Packed for Shipping 140 Lbs

For Extra Cylinders for above, see Page 351

Showing the Milburn Acetylene Light in use on a Dredge where two smaller lights are being operated from the one generator

Average cost for the Operation of the above Lamps 5c per night. It costs 1¼ cents per 1,000 Candle Power per hour



Showing a Milburn Acetylene Light in use on a Wrecking Car

PORTABLE ACETYLENE LIGHTS

☞ The best size of Carbide to use in these Lights is the Egg or ½x2 in.

ENTIRE PAGE F. O. B. MINNEAPOLIS

ENGINE

Especially adapted for Builders, Contractors, Railroads, Mines and Circuses

*Each

No. 3X—5000 to 12,000 Candle Power; Lights 1500 Feet; Size of Tank 12x12x36 in.; Entire Height 6 ft.; Supplied complete with an Extra Single Cylinder which enables the Light to be recharged instantly; Unaffected by Vibration, Wind or Weather; Flame can be regulated from the maximum light to a needle point, Lights instantly and requires no attention during use; Burning Capacity 17 hours; Charge of Carbide 18 Lbs.....$166.00

Weight Empty 90 Lbs.; Weight Packed for Shipping 121 Lbs

RECHARGING CYLINDERS

For instantly recharging Milburn Lights Comprises Set of Trays, Inner Receptacle and Cover, Complete.

For No. 3X Lights $36.00
For No. 3W Lights 36.00
For No. 2 Lights 24.00

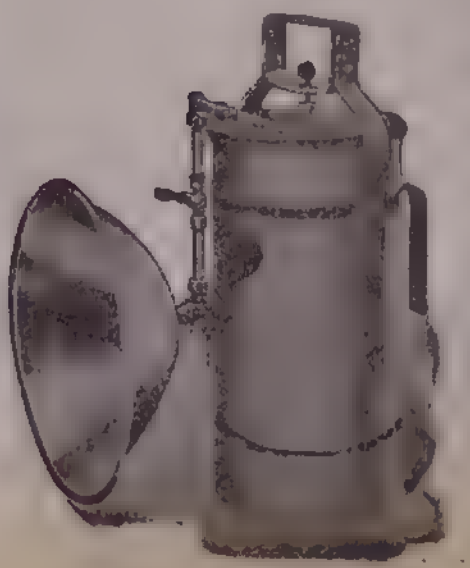
COMPACTION

Adapted for lighter work than the No 3X for Builders, Contractors, Railroads, Mines and Circuses

*Each

No. 2—3000 Candle Power; Lights 1000 Feet; Size of Tank 10x10x30 in.; Entire Height 5 ft.; Supplied with an Extra Single Cylinder giving a total Burning Capacity of 12 Hours, and enabling Light to be recharged instantly; Fitted with 12 in Non-tarnishable Parabolic Reflector and Storm Proof Burner; Light can be regulated from a needle point to 3000 Candle Power; Charge of Carbide 9 Lbs.....$124.00

Weight Empty 50 Lbs.; Weight Packed for Shipping 75 Lbs



EMERGENCY AND BUILDER

EMERGENCY LIGHT

For Fire, Salvage, Street Railways and Emergency Work

*Each

No. E—4000 Candle Power; Lights 500 ft.; Size 7x14 in.; Has a Watertight cover and is substantially made throughout; Fitted with Swing Joints which enable it to be directed at any angle up or down; Will hook on to Ladders, Roofs or Wagons; Has a 10 in. Non-tarnishing Parabolic Reflector, 6 in. deep, Burning capacity 1½ Hours; Charge of Carbide 2½ Lbs.....$44 00

Weight Empty 11 Lbs.
Weight Packed for Shipping 28 Lbs.

BUILDER LIGHT

A very convenient Hand Light for Railroads, Tunnels and Mines and for Contractors' and Builders' work.

*Each

No. B—Same as Emergency Light except it is supplied with a lower Candle Power Burner (500 Candle Power) with a Burning Capacity of 10 Hours $44.00

Weight Empty 11 Lbs.
Weight Packed for Shipping 28 Lbs.

HANDY

A convenient Hand Light for Tunnels, Sewers, Trenches, Work Shops, etc.

*Each

No. 1—100 Candle Power; Size 6x12 in.; This Light uses a Lava Burner and supplies a flat smokeless flame; It is furnished with an 8 in. Reflector, which is readily removable and supplies a steady brilliant light, which will withstand light currents of air Burning Capacity 6 Hours; Charge of Carbide 1½ Lbs.....$24.00

Weight Empty 6½ Lbs.
Weight Packed for Shipping 13¼ Lbs.

ACETYLENE GAS LIGHTING MACHINES

The Best Lighting System obtainable for Country Homes, Bungalows, Stores, Churches, Public Halls, Hotels, Schools, Light Houses, Etc.

These Machines are permitted by the National Board of Fire Underwriters, which in itself is the highest recommendation of Safety.

Acetylene is not only the Best Light, but candle power for candle power it is the cheapest of all known illuminants.

The Gas Piping and Fixtures for Acetylene are the same as for ordinary City Gas, except the Burner Tip, which is simple and inexpensive; The usual size of Piping for an ordinary residence is ¾ in. Risers, ½ in. Mains and ⅜ in. Branches and Drops; No Mantles or Glassware of any description are necessary, though both may be used. If the house is properly Piped, no odor can possibly be detected; A Set of Cautions is given with each Permit for use of Acetylene Gas, and Full Directions for installation are furnished with each Machine, making it easy for any ordinary mechanic to put the Plant in running order; it is not necessary for a Pipe to show on Ceiling or Wall, and the Carpet will not have to be cut—only the Polished Brass Fixtures will show.

Showing Complete Installation

IDEAL EPWORTH, CARBIDE FEED

F. O. B. Waterloo, Iowa

These Machines are simple in design, consisting of **two Tanks**, the right hand tank is the **Generating Tank**, and contains the **Carbide Holder** on top under which is hung the **Droppers**. There is no piping in the generating chamber, only the **Agitator**, which prevents any scum gathering on the top of the water. Connected to this tank are the **Filling Funnel** and the **Sludge Gate**. The left hand tank is the **Gasometer**, and contains the **Floating Gas Bell** and the **Drip Chamber**, also the **Supply Pipe** from the Generator to Bell. Over the top of this tank is hung the **Gas Wash or Seal**, also the **Exhaust Pipe** in the center, and the **House Supply Pipe** on the left which is connected to **Filter**. The best of material is used in its construction consisting of **No. 1 Galvanized Iron and Galvanized Gray Malleable Castings and Fittings.**

This Generator automatically drops a small quantity of carbide into a large body of water; One gallon of water is allowed for each pound of carbide. ⅛x1/12 **in. is the proper size of carbide to use as it will yield 10% more Gas than the coarse grade. This Machine can be charged while the burners are in use**

No. of Generator	Lbs. Carbide Capacity	No. 25 C. P. Lights or 5 foot Burners	Height in Inches	Floor Space in Inches	Size of Connection to House	Shipping Weight	Width of Opening to admit Generator, In.	Each
25	25	1 to 25	64	24x36	¾ in.	240	28	$120.00
35	35	1 to 35	68	36x38	¾ in.	260	28	150.00
50	50	1 to 50	70	36x50	¾ in.	360	36	175.00
75	75	1 to 75	74	36x50	¾ in.	400	32	250.00
100	100	1 to 100	76	40x54	1 in.	475	32	300.00
200	200	1 to 200	76	44x96	1¼ in.	750	36	500.00
300	300	1 to 300	78	52x114	2 in.	1050	36	750.00
500	500	1 to 500	84	48x138	2½ in.	1200	48	1000.00
1000	1000	1 to 1000	96	60x120	3 in.	1600	60	1800.00

MILBURN, CARBIDE FEED

F. O. B. Baltimore, Maryland

The Milburn Generator is constructed within one body, thus taking up the minimum space for shipping, storage and installation. It has no clockwork or complicated parts, and utilizes the first principle of nature (gravity), and the simplest mechanical agent (a revolving wheel). The Carbide rests upon the circumference of this wheel which is moved by a lever operated within the Gas Bell, but controllable from the outside. This wheel feeds and weighs the Carbide in predetermined quantities into the water and thus makes the gas. ⅜x1¼ in. is the best size of Carbide to use in these machines. At the head of the Carbide Chamber is a Rotary Indicator which turns as the Carbide is fed into the water, thus showing the user in plain figures at any time the number of pounds of unused Carbide in the Generator

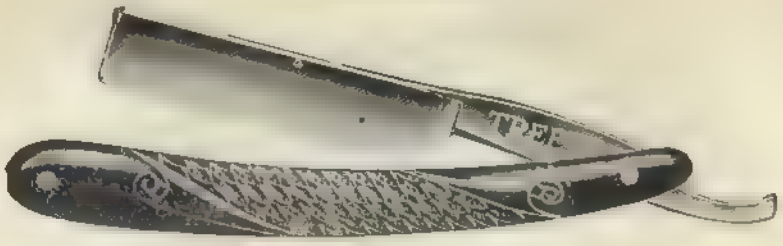
The body is built of the best **Rolled Steel thoroughly Galvanized** and closely riveted or double seamed. The fittings are well designed and substantially made of **Brass and Malleable Iron.** Every part is guaranteed for a period of two years by the manufacturers.

No. of Generator	Lbs. Carbide Capacity	No. 25 C. P. Lights or 5 foot Burners	Height in Inches	Floor Space in Square Inches	Size of Connection to House	Shipping Weight	Width of Opening to admit Generator, In.	Each
35M	35	1 to 35	63	32	¾ in	375	32	$150.00
50M	50	1 to 50	63	32	¾ in	425	32	175.00
75M	75	1 to 75	65	36	¾ in.	500	36	250.00
100M	100	1 to 100	70	39	1 in.	600	39	300.00
200M	200	1 to 200	On Application					600.00

For Fixtures, see Pages 373-400; Burners, page 365; Glass Ware, 425-434

RAZORS

TREE BRAND



No. 106. ⅝ in. special hollow ground, front side of blade crocus polished ..... per dozen, $24.00

No. 1296. ⅝ in. special hollow ground ..... per dozen, $24.00

No. 2646. ⅝ in. three-quarters hollow ground, glazed blade, crocus polished tang, white genuine celluloid handle with design of German silver inlaid..... per dozen, $26.00

No. 291. ⅝ in. half concaved ground, etched "Our Leader," glazed blade, crocus polished tang, fancy white celluloid handle ..... per dozen, $24.00

No. 1036. ⅝ in. three-quarter hollow ground, front side of blade crocus polished ..... per dozen, $30.00

One-half dozen in a box

RAZORS

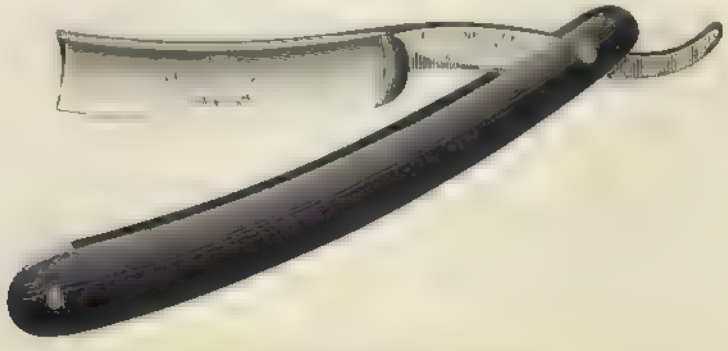
TREE BRAND

No. 1801. [illegible] special half [illegible] imitation tortoise shell handle ..... per dozen, $30 00

No. 101. 5/8 in. special full Hamburg ground..... per dozen, $36 00

No. 236. 5/8 in., extra hollow ground..... per dozen, $25 00

HESSENBRUCH RAZORS

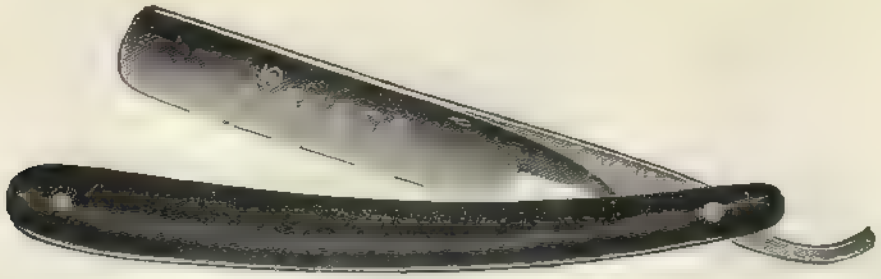


Hand Forged, Hollow Ground

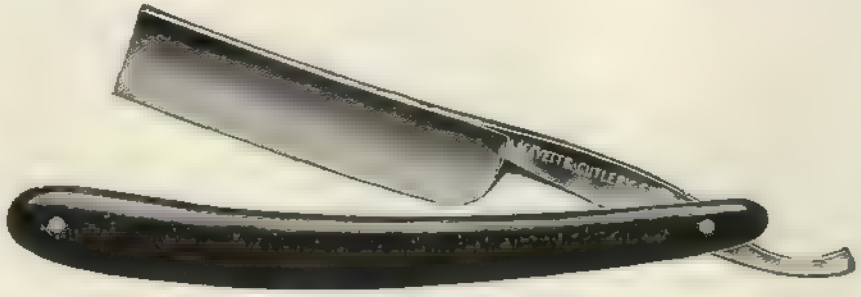
No. 100. 5/8 in. concave blade, black handle..... per dozen, $20.00
No. 187. 5/8 in. concave blade, black handle, ivory tined..... per dozen, 42.00

One-half dozen in a box

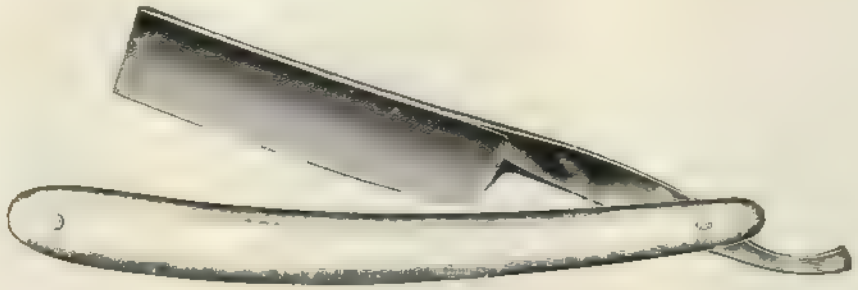
RAZORS



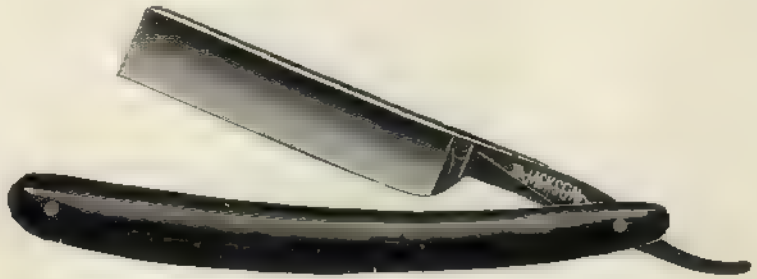
No. 926. Prince ⅝ in. full polished and etched file cut tang . . .per dozen, $24.00



No. 2264. La Fayette, ⅝ in. square point, hollow ground, glazed blade, black handle..... .....per dozen, $10.00



No. 2273. ⅝ in. square point, hollow ground, glazed blade, white handle .....per dozen, $12.00



Buckeye

Made from S. & C. Wardlow English steel, nickel plated back and tang, black handles

Buckeye Razors, ½ in. square point blade.. .. . . . . .per dozen, $16.00
Buckeye Razors, ⅝ in. square point blade. .. . . . . per dozen, 16.00

One-half dozen in a box

RELIABLE ROLLING STORE OR SHELF LADDERS

RELIABLE STRAIGHT SIDE LADDERS

For use where there is no base shelf and the Trolley Ladder is impractical.

The Track is ⅜ in. diam. round steel tube on special brackets, of the same construction as the Reliable Barn Parlor and Fire Door Track.

The Ladder is made of selected kiln dried lumber; rubbed, oiled, filled and varnished; the sides are 3½ in. wide, the steps are 4 in. deep and the ladder is 12 in. wide inside. Each step is mortised into the side pieces and fastened with four screws; three stay bolts give extra strength to the sides and steps.

The Hangers are adjustable, giving a perfect bearing at any angle; there is a free movement of ladder with uneven floor or ceiling and the four wheels prevent binding or derailing; 2 in. Hard Paper Noiseless Wheels, with Brass Bushings.

The Floor Travelers are 4 in. Diam., rubber tired

Each

No. 80—Solid Oak Ladder, Fitted Complete.....$19.00
Weight 4 Lbs. per Foot

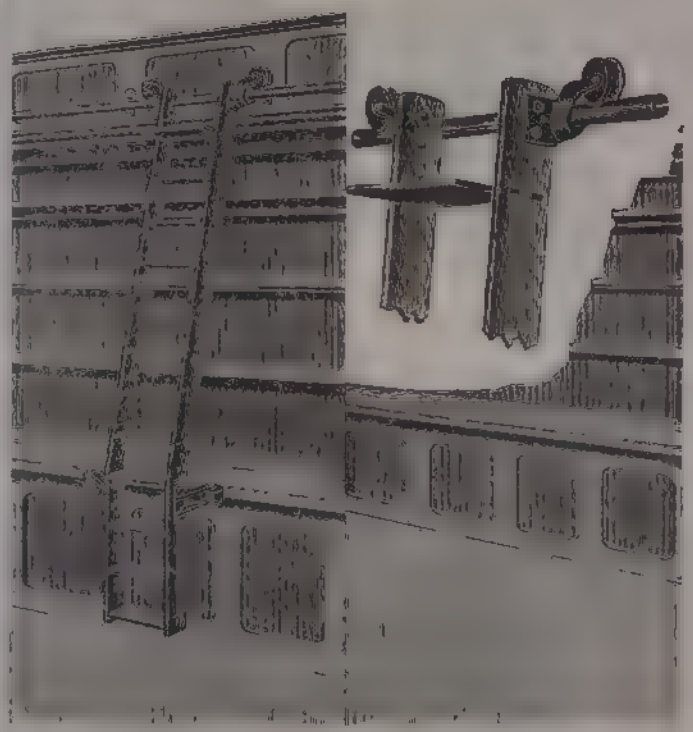
Per Set

No. 81—Upper and Lower Fixtures Only, Regularly Furnished for 12 in. Ladder; Weight 10 Lbs. per Set.....$6.00

Per Foot

No. 1L—⅜ in. Tubular Steel Track, with Brackets.....$0.12
Weight 80 Lbs. per 100 Feet

In Ordering, give height from floor to center of track; length of track and number of brackets (about 4 ft. apart as uprights permit).



RELIABLE BENT BASE LADDERS

The Track is 1⅛ in. diam. round steel tube on special brackets, of the same construction as the Reliable Barn, Parlor and Fire Door track.

The Ladder is made of selected kiln dried lumber; rubbed oiled, filled and varnished; the sides are 3½ in. wide, the steps are 4 in. deep and the ladder is 12 in. wide inside. Each step is mortised into the side pieces and fastened with four screws; three stay bolts give extra strength to the sides and steps.

The Hangers are malleable iron, with great strength and wide bearing on both track and base shelf; wheels are 3¼ in. diam., brass bushed, roller bearing, with hard paper tread.

The base ledge Travelers are rubber tired, with wide bearing.

Each

No. 90—Solid Oak Ladder, Fitted Complete.....$20.00
Weight 4 Lbs. per Foot

Per Set

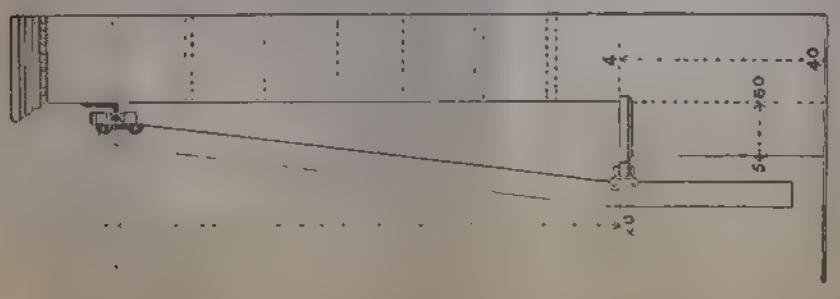
No. 91—Upper and Lower Fixtures Only, Regularly Furnished for 12 in. Ladder; Weight 8 Lbs. per Set.....$6.00

Per Foot

No. 2L—1⅛ in. Tubular Steel Track, with Brackets.....$0.15
Weight 120 Lbs. per 100 Feet

In Ordering, give height from floor to top of base ledge; width of base ledge to front of partitions of shelving; height from base ledge to center of track; length of track and number of brackets (about every 3 feet, as the uprights permit).

All can be furnished with a 9 in., Extra Deep Top Shelf, as shown in Right Corner, at no extra cost



In Ordering Ladders, give measurements as follows:

Bent Base Ladders, 2 to 20; 4 to 40 and 5 to 50

Straight Side Wall Ladders, give 2 to 40 (floor)

Trolley Ladders, give height, from floor to ceiling

All F. O. B. Danville, Ill., Direct Shipment Only

TROLLEY STORE OR SHELF LADDERS

For Shelving with narrow base ledge or none at all; a wide counter at bottom forces ladder too far away from shelving. Trolley ladders are easiest to mount, both hands are free to carry goods up or down, give better access to the goods on the shelves, do not interfere with slightly projecting boxes, etc.

RELIABLE ROUND TRACK TROLLEY

The Track is double-tube, two round ⅞ in. steel rails suspended by patent hangers; on the same principle as the Reliable Barn, Parlor and Fire Door track which is so satisfactory.

The Ladder is made of selected kiln dried lumber, rubbed, oiled, filled and varnished; the sides are 3½ in. wide, the steps are 4 in. deep, the ladder is 12 in. wide inside.

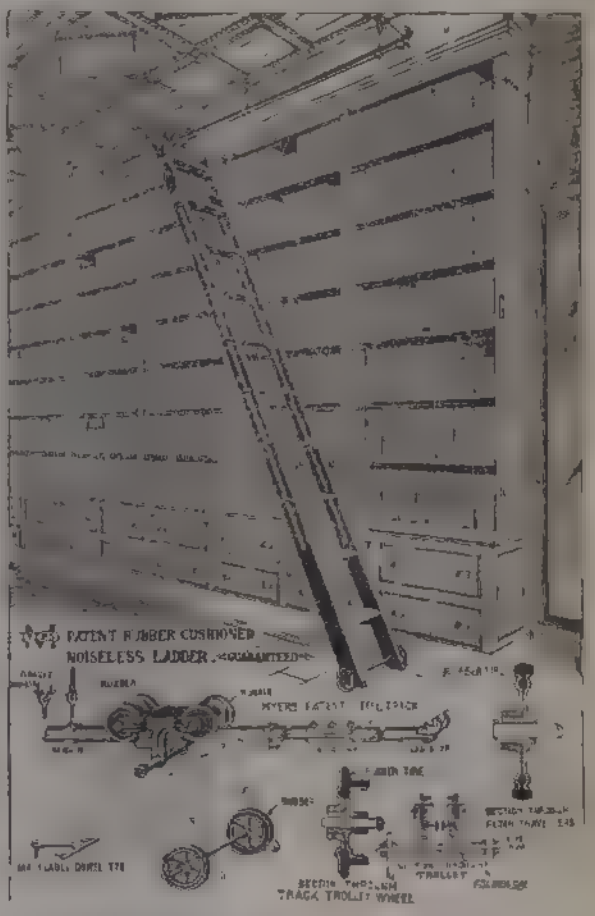
Each Step is mortised into the side pieces and fastened with four screws; three stay bolts through the sides give additional strength; a 9 in. extra deep top shelf will be furnished at no additional cost, if ordered.

The Trolley is self-adjusting; malleable iron frame, with four brass bushed, roller-bearing fibre tread wheels; practically noiseless and very durable; space the hangers 24 to 30 in. apart.

The Floor Travelers, attached to both legs, are 3½ in. diameter, roller-bearing and rubber tired.

F. O. B. Danville, Ill.

	Each
No. 95—Solid Oak Ladder, Fitted Complete	$19.00
Figure Weight at 4 Lbs. per Foot	
	Per Set
No. 98—Upper and Lower Fixtures Only, as Regularly Furnished for 12 in. Ladder; Weight 15 Lbs. per Set.....	$9.00
	Per Foot
No. 11L—Double Tubular Track, with Brackets.....	$0.25
Weight 1½ Lbs. per Foot	



MYERS CUSHION TIRED TROLLEY

The Track is a double angle steel rail, either suspended by jointed or rigid hangers or screwed close to ceiling with flanged plates; thus leveling an uneven surface without any blocking, bridging or other difficulty.

The Ladder is constructed of strictly clear Georgia Pine, nicely finished, filled and varnished; the sides are 5 in. wide, open paneled; the steps are 5 in. deep, supported by special malleable tees, the ladder is 12 in. wide.

The Trolley is self-adjusting, made of malleable iron, with turned steel bearings, 3 in. anti-rattler wheels, lathe finished and rubber tired.

The Floor Travelers are 5 in. diameter, with rubber cushion tires; the steel axle runs through both legs.

The rubber tread of both hangers and floor travelers makes this ladder almost noiseless.

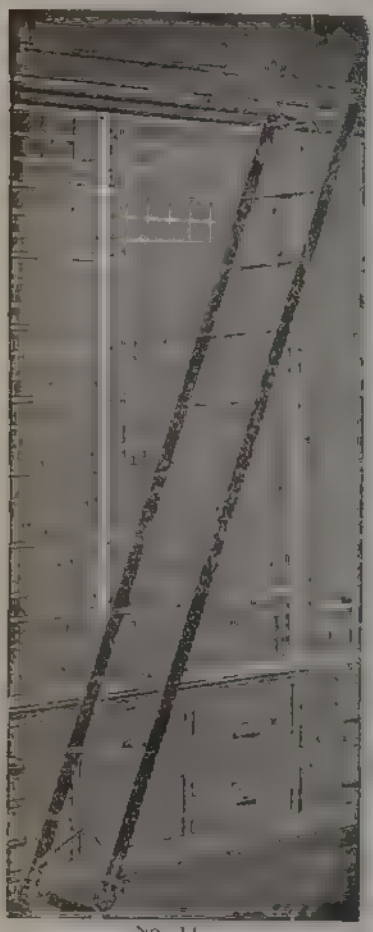
F. O. B. Ashland, Ohio

	Each
Myers Ladder, Fitted Complete.....	$20.00
Weight 40 to 50 Lbs., according to Length	
	Per Foot
Myers Track, Complete with Hangers.....	$0.30
Weight 3 Lbs. per Foot	

In ordering, give the height of ceiling and length of track wanted. If height varies, give measurements at ends and center of run

MILBRADT ROLLING STORE OR SHELF LADDERS

For Hardware, Shoe, Drug, Grocery and General Stores, Jobbing Houses, Large Office Vaults, Libraries, Book Stores, Factories, Machine Shops and any place where High Shelving is to be easily, quickly and safely reached



No. 12

No. 1

No. 2

No. 5

For all kinds of High Shelving. Where the base shelf is narrow, the Roller Arms can be made longer or placed at bottom to run against the base. They are constructed to take up the least possible space and are noiseless, neat and durable, running so easily that a light push will propel the Ladder the length of an ordinary store. Side Ladders are 17 in. Wide, Sides 2½ in. Wide, Top Shelf 7½ in. Deep, Steps 3½ in. Deep; **Trolley Ladders are 13½ in. Wide, Sides 2½ in. Wide, Steps 4¼ in. Deep.**

Widths given are at the Top and increase ¼ in. at every step toward the Bottom.

	Each
No. 12—Trolley Ladder, Oak, all Iron Parts Aluminum Bronzed, Runs on Steel Track Fastened to Ceiling, Used Where the Base Ledge is not Wide; is Easy to Mount, with Both Hands Free to Carry Goods	$12 50
No. 1—Bent Ladder, Oak, all Iron Parts Aluminum Bronzed, Runs Close to Wide Base Shelf, Rubber Rollers, Preferable for all Shelving with Wide Base	13.75
No. 2—Bent Ladder, Oak, Legs Supporting Weight on Floor Wheels, Relieving Shelving when it is not Substantial Enough, Wheels at Top Slide Up and Down to Equalize Unevenness of Floor, Takes Wood Track, Used Where Shelving is not Very Strong or Does not Run Down to Floor; all Weight Rests on Floor Surface	13.75
No. 5—Straight Ladder, Oak, all Iron Parts Aluminum Bronzed, Runs Close to Wide Base Shelf, Rubber Rollers, is Easily Climbed, but the Bottom Projects too Far for Very Narrow Aisles	12.50

TRACKS FOR ABOVE LADDERS

	Per Foot
No. 12T—Trolley Track for No. 12 Ladder, Including Brackets and Lag Screws	$0.25
No. 1T—Hardwood Track for No. 1 or No. 5 Ladder, Including Screws	12½
No. 2T—Hardwood Track for No. 2 Ladder, Including Screws	19
No. 5T—Steel Track for No. 1 or No. 5 Ladder 1 in. Diam. Outside, Aluminum Bronzed, Regular Weight for Brackets 4 ft. or Less Apart	19
No. 15T—Extra Strong Steel Track for No. 1 or No. 5 Ladder, 1 in. Diam. Outside, Aluminum Bronzed, for Brackets up to 5½ ft. Apart	25
	Each
No. 5B—BRACKETS for Steel Track	$0 25

EXTRAS FOR NICKEL PLATING

Per Ladder	Per Foot	Each
For Nickel Plated Trimmings, Add .$2 50	For Nickel Plated Track, Add ... $0 12½	For Nickel Plated Brackets Add $0 12½

All F. O. B. St. Paul. Each Ladder is "Made to Order"

Average Weight of Ladders, 50 Lbs. Each; Steel Track, 1 Lb.; Wood Track, ½ Lb. per Foot

HOW TO ORDER

Trolley Ladders: Give height from floor to ceiling

Bent or Straight Ladders: Give height from floor to top of base or counter shelf; width of base shelf to front edge of uprights or partition in shelving; height from base shelf to top of shelf or cornice on which the track is to be fastened.

In all cases give exact length of Track required, as well as number of Brackets wanted. (To make a solid track, brackets should be **four feet or less apart). For further information, send for Special Catalog.**

The Ladders are all finished in natural wood, but will be furnished any color to suit store, if order is so given, or without finish thereby making it more certain for you to match color of shelving. Give any additional information you can that will facilitate the production of just what you want and ought to have, sketch, etc. **The track should run three or four feet below the top of the shelving.**

SHEEP SHEARING MACHINES

THE STEWART No. 8 ENCLOSED GEAR SHEEP SHEARING MACHINE

All moving parts are enclosed in a dust proof case, where they run in oil. This practically does away with friction and wear. It turns easily and stays [illegible]

The gears are cut from the solid steel bar and are hardened file hard by special hardening process; they couldn't be harder or tougher. Fitted with shearing handle and

4 combs and 4 cutters, total $5.75
Horse clipping attachment 5.00
Combined No. 8 machine for both sheep shearing and horse clipping 15.25

Weight, boxed, 36 pounds

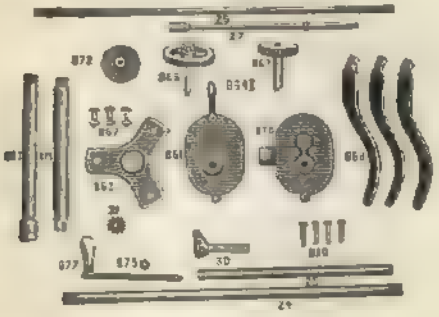
STEWART No. 9 BALL BEARING SHEEP SHEARING MACHINE

Base and upright of this machine are the same as those and upright of the Stewart No. 1 ball bearing clipper. They are as substantial as it is possible to make them. The gear train is very similar to that of the No 1 clipping machine also, but there is a much larger [illegible] wheel to assist in the easy running of the; the machine is in motion [illegible] joint in the shaft and the shearing head itself is fitted with ball bearings, producing a machine that turns easier and cuts faster, with less effort on the part of the operator, than any machine ever made

Price of each machine, fitted with No. 7 ball bearing shear and 4 combs and 4 cutters.....$11.50

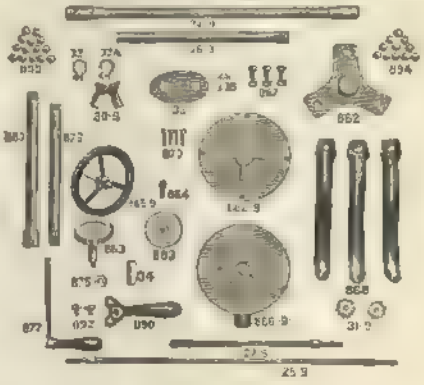
Weight, boxed, [illegible] pounds

PARTS OF STEWART No. 8 ENCLOSED GEAR SHEARING MACHINE



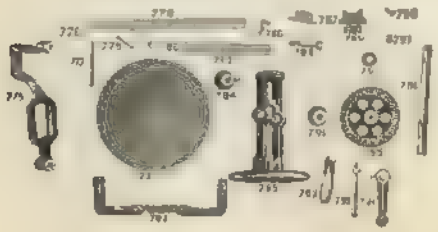
No.		Price
24	Long tube	$ .75
25	Long spindle	2.00
26	Short tube	.50
27	Short spindle	.75
30	Universal joint yoke	.75
31	Universal joint cog	.40
860	Gear case	1.00
861	Gear case cover	.75
862	Leg bracket	.35
863	Drive gear case spindle	1.50
864	Cotter pin	.02
865	Balance wheel and spindle	1.00
867	Bracket studs and nuts, per set	$0.15
868	Legs	.35
870	Gear case screws, each	.05
872	Intermediate gear and pinion	2.00
875	Handle nut	.05
877	Crank handle	.50
879	Upper part of upright	.40
880	Lower part of upright with coupling	.60

PARTS OF STEWART No. 9 BALL BEARING SHEARING MACHINE



No.		Price
24-9	Long tube	$1.50
25-9	Long spindle	2.00
26-9	Short tube	.50
27-9	Short spindle	.75
30-9	Universal joint	2.00
31-9	Universal joint cog	.40
32	Upper tube clamp	.25
32-A	Lower tube clamp	.25
33	Leather guard	.15
33-B	Hook for leather guard	.2
34	Bayonet screws	.3
862	Leg bracket	.35
863	Drive gear case spindle	1.50
864	Cotter pin	.02
865-9	Balance wheel and spindle	1.00
867	Bracket studs and nuts, per set	.15
868	Leg, each	$0.35
870	Gear case screws each	.05
875	Hexagon nut for crank	.5
877	Crank	.50
879	Upper portion of upright	.40
880	Bottom portion of upright	.60
882-9	Gear case cover	.75
883	Intermediate gear and pinion	.20
889	Gear case	.40
890	Grip handle	.25
892	Grip screws each	.10
894	Set of ball bearings for spindles	.10
895	Set of ball bearing gears	.15

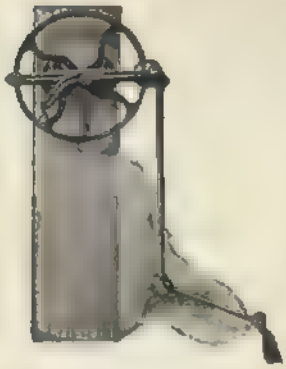
STEWART NEW AUTOMATIC GRINDER PARTS



No.		Price
775	Sliding bar ejector	$0.[illegible]
776	Revolving roll	.5
777	Disc spindle	.50
778	Sliding bar	.75
779	Key [illegible] roll	.10
780	Ejector spring	.25
781	Steel disc	2.50
782	Sliding bar holder	.75
783	Feeder bar	.10
784	Ejector [illegible]	.50
785	Frame	2.00
786	Thumb screw	.05
787	Cutter holder	$0.25
788	Ejector bolt	.25
789	Comb holder	.75
791	Pinion	.50
792	Wood handle	.10
793	Handle bolt and nut	.15
794	Crank	.25
795	Gear	1.00
796	Axle	.50
797	Bolt and nut for sliding bar	.10
798	Center pin	.10

SHEEP SHEARING MACHINES

STEWART NEW MODEL SHEEP SHEARING MACHINE



Has all its gearings cut from solid metal.

All wearing parts are of tool steel, hardened.

Has the latest improved shear.

Simple in construction, with few parts. Easy to adjust—easy to keep in order. A small boy can turn the crank without tiring.

It shears clean, saving 1 to 1½ lbs. of wool to a fleece. Saves time, saves labor, saves wool, and saves the sheep.

*Price, with 4 combs and 4 cutters	$12 75
Horse clipping attachment	5.50
Combined New Model Machine for horse clipping and sheep shearing	18 25

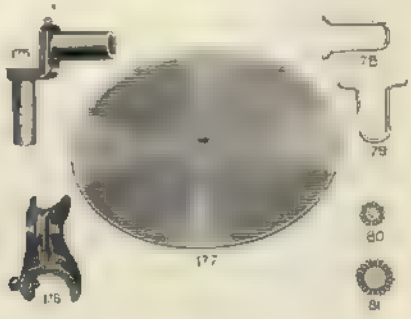
SHEEP SHEARING ATTACHMENT FOR USE ON STEWART No. 1 OR No. 2 CHICAGO HORSE CLIPPING MACHINES

Attachment consists of complete No. 5 Stewart shear head, 4 sets of shearing knives; the solid core, universal jointed shafts and cogs as shown here.

Price of complete attachment.....$7.75

Parts and prices thereon for this attachment are same as for the corresponding parts of the No. 8 Shearing Machine.

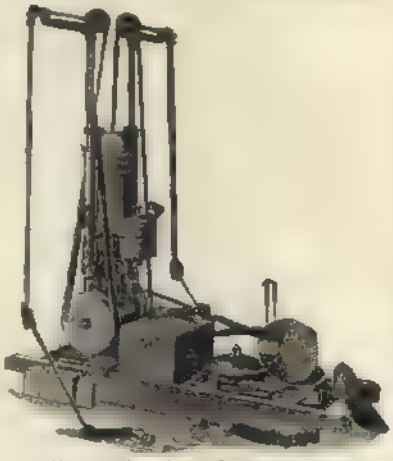
STEWART No. 11 IMPROVED GRINDER PARTS



No.		Price
175	Angle head	$1 00
176	Angle clamp	25
177	Disc	2 00
178	Plate holder for shearing knives	.10
179	Plate holder for clipping knives	$0 10
180	Small cog	25
181	Large cog	.50

*Not carried in stock

STEWART LITTLE WONDER SHEEP SHEARING MACHINE



This machine consists of two improved power shearing machines, operated by a full 2 horse power gasoline motor. This outfit is suited to those who own from 300 to 5,000 sheep. It is a complete, perfect portable sheep shearing plant for two men, but either machine may be operated alone if so desired.

Weight of outfit complete, 300 lbs.

The engine is a 2 horsepower gasoline motor, perfect in all its details. A gallon of gasoline will run it 10 hours; a single crank starts it, and anyone of ordinary intelligence can take care of it. The outfit is supplied with two latest type Stewart wide shears. This shear has a 4 tooth cutter and a 14 tooth comb.

*Price complete with grinder $100 00

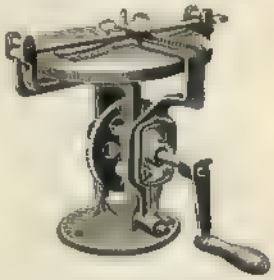
This includes everything but combs and cutters.

With this machine you should have at least 12 wide combs and 24 combs.

Price of combs, each	$0 60
Price of cutters, each	15

If desired, the engine can be disconnected from the shearing machines and used for other purposes.

STEWART NEW AUTOMATIC GRINDER FOR HORSE CLIPPING AND SHEEP SHEARING MACHINE KNIFES



It grinds the knives of horse clipping and sheep shearing machines in a few seconds to cut equal to new. Requires no skill or experience, as it is automatic and cannot do it wrong. It is made of metal throughout. If it is desired to run it by power, a pulley may be substituted for the crank.

Fitted for Horse clipper knives, each	$5 00
Fitted for sheep shearing knives, each	6 00
Fitted for both horse and sheep knives	6.50
Extra knife holders, per set	.50
Grinder paste, per package	25

In ordering this Grinder, specify the kind of knives you expect to use it for. Mention whether for horse clipper knives, No. 5 shear knives, or No. 4 shear knives. That will do away with possible chances for error.

Weight, boxed, 45 pounds

HORSE CLIPPING MACHINES

STEWART No. 1. THE BALL BEARING ENCLOSED TYPE CLIPPING MACHINE

Has rigid base; tubular upright; gears all cut from solid metal and enclosed in dust proof metal box; all wearing parts are of hardened steel; new style, light, easy running flexible shaft, 6 ft long, compact—can be carried in a satchel or handled as shelf goods. The most perfect clipping machine ever made at any price

Weight, boxed 36 lbs., each . . . . . $ 7 50
Sheep shearing attachment 7 75
Combined No. 1 machine, for both horse clipping and sheep shearing 15 25

No. 2 CHICAGO CLIPPING MACHINE

(Stewart Patent)

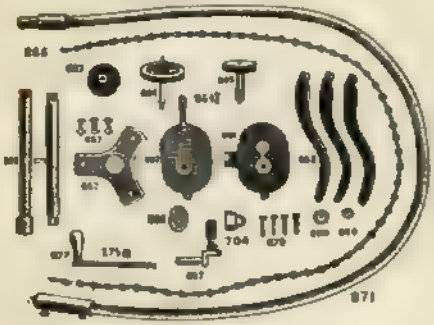
Has rigid base; tubular upright, large, strong crank handle; 6½ ft. flexible steel shaft; teeth in large gear all cut from solid metal; wearing parts all hardened tool steel; positive power; no belt to slip. Can be turned with either hand. Simple, strong, durable. It is light running and noiseless. Will clip a horse in 30 minutes.

Weight, 56 lbs. Boxed 70 lbs., each $10 75
Sheep shearing attachment 7 75

Combined No. 2 Chicago machine, for both horse clipping and sheep shearing 18.25

PARTS OF STEWART No. 1 BALL BEARING CLIPPING MACHINE

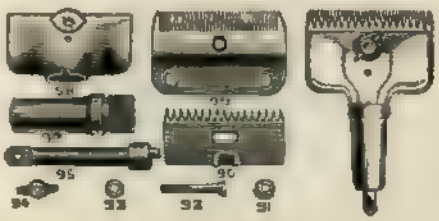
(As supplied since Aug. 1, 1908.)



No.		Price
704	Gear case cap	$0 50
886	Gear case	1 00
882	Gear case screw cover	.25
862	Leg bracket	.35
885	Drive gear and spindle	1.50
864	Cotter pin	.02
884	Balance wheel and spindle	1 00
866	Chain for shaft, 6 ft	1 80
867	Bracket studs and nuts per set	.15
868	Legs	35
887	Gear head casing	1 50
870	Gear case screws, each	.05
871	Shaft without chain, 6 ft.	$3 00
883	Intermediate gear and pinion	2 00
875	Handle nut	.05
876	Eye spindle	.50
877	Crank handle	50
879	Upper part of upright	40
880	Lower part of upright with coupling	.60
888	Balance ball cup	.75
889	Small cog	.25
890	Large cog	.50

PARTS OF HANDLE AND KNIFE USED ON ALL STEWART HORSE CLIPPING MACHINES

Postage on a set of horse or sheep knives by registered mail is 18 cts.



Stewart patent horse clipper handle and knife, complete $3.50
Stewart patent horse clipper knife without handle 2 50
Stewart patent horse clipper handle only . 1.00
No. 90 Top plate 1.00
No. 91 Tension spring of handle 05
No. 92 Tension bolt of handle 05
No. 93 Eccentric roll of handle 1
No. 94 Tension nut of handle 05
No. 95 Pin and shaft of handle 35
No. 97 Shank of handle 40
No. 98 Front part of handle 50
No. 99 Bottom plate . . . $1.50
Price of grinding all kind of horse clipper knives, per set 50
Price of grinding sheep shear knives per set 10
Price of chain for flexible shaft per ft 30
Price of flexible shaft complete, per ft. 75
Price of shaft without chain, per ft. 50
Price of oil, per qt 50
Price of oil, per gal 1 00
Price of chain paste, 1 lb. can 5
Price of chain paste, 3 lb. can 50
Price of small quart can, full of oil 15
Grinder paste, per package 25

THE IMPROVED STEWART No. 11 GRINDER

This Grinder has big advantages over any device heretofore used for grinding the knives of Stewart Horse Clipping or Sheep Shearing Machines, and will fit on any Stewart No. 1 Horse Clipping Machine, or any Stewart No. 8 Sheep Shearing Machine, regardless of when it was purchased.

This Grinder is constructed of Metal throughout, and by a simple and ingenious mechanism is attached to the gear case of the machine in place of the shaft.

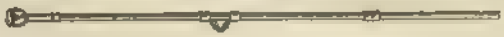
With this Grinder anyone can give the knives a sharp, keen cutting edge in a few seconds. If you do not have a good grinder, by all means order one of these. Weight, boxed, 8 pounds.

Price, complete, ready to attach to clipping or shearing machine $3 50

FISHING ROD SUNDRIES

SAMSON

TROLLING TIPS



9 In. Long

No. 1. Two ring standing guide and three ring top. . . . . each, $0.80
No. 2. Two ring standing guide and agate top. . . . . each, 1 50
No. 3. German silver trumpet guide, double hole German silver top . . . . . each, 1 00
No. 4. German silver trumpet guide and agate top. . . . . each, 1.60

EMERGENCY TIPS

Emergency Tips with regular three ring top on a short tip with a regular joint 2½ in. long, each. $0.12

ROD SHORTENERS

Rod Shorteners, each $0 15

AGATE GUIDES

Agate Guides, each $0 50

GERMAN SILVER TWO RING GUIDE

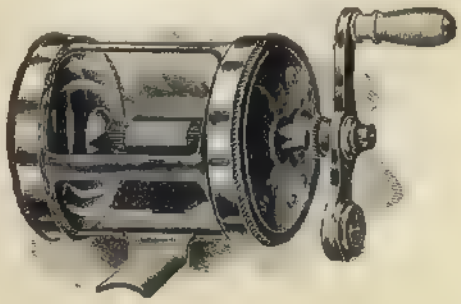
German Silver Guides, large, each $0 10

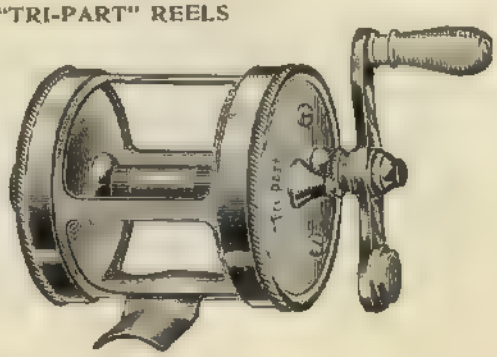
FISHING REELS

THE SOUTH BEND ANTI-BACK-LASH CASTING REEL

South Bend Anti-Back-Lash casting reel, capacity 100 yards, solid German silver frame, light, strong and rigid, jeweled spool caps . . . . . each, $7.50
Casts can be made just as accurately, with more ease and to greater distances than with ordinary reels, with the added certainty that no troublesome back-lash will result.

MEISSELBACH "TAKAPART" AND "TRI-PART" REELS



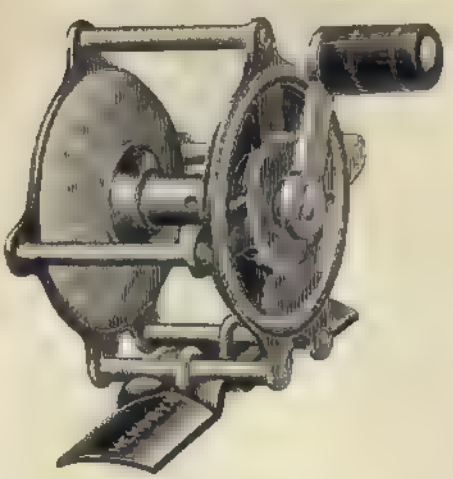


Quadruple Multiplying

The reel is made of brass, nickel plated with spool of German silver. The pinion gear is cut from steel.

No. 480. Takapart Reels, spool 1⅝ x 1¼ in., capacity 100 yards, each $4.00
No. 481. Free Spool Takapart Reels spool 1⅝ x 1¼ in., capacity 100 yards, each 6.00
No. 580. Tri part reels, spool 1⅜ x 1¼ in capacity 80 yards, each $3.00
No. 581. Free Spool Tri-part reels, spool 1⅜ x 1¼ in., capacity 80 yards, each 5.00

FISHING REELS



Nos. 5 and 6

HENDRYX

Single Action

Brass

Capacity 40 yards

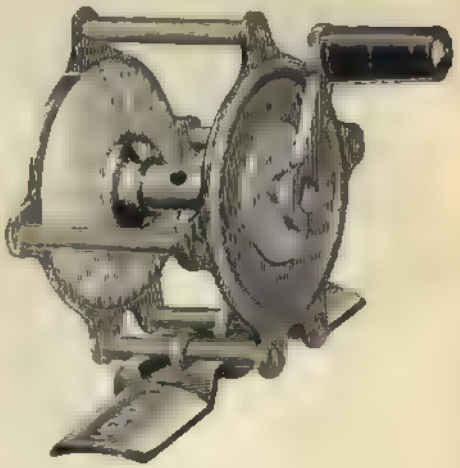
No. 5. No click, per dozen $1 60
No. 6. With click, per dozen 2.50

Single Action

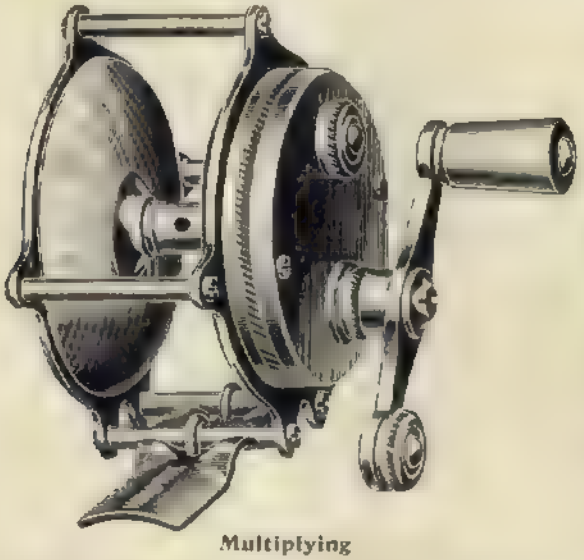
Steel, Nickel Plated

Capacity 40 yards

No. 10. With click, per dozen $4 00



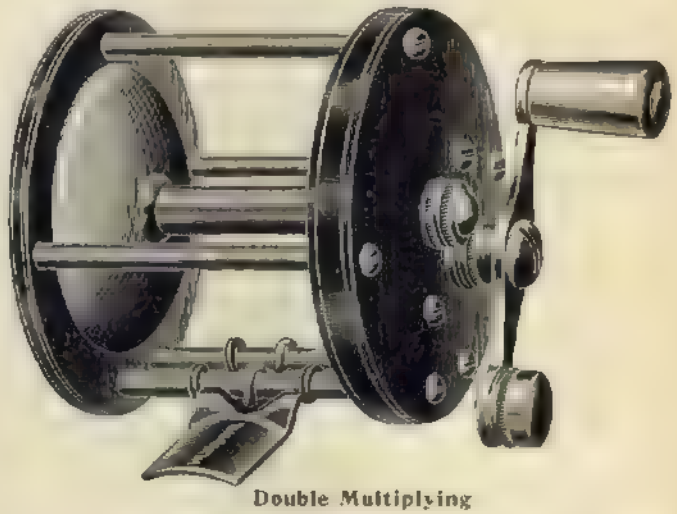
No. 10



Multiplying

Nickel plated. Adjustable back sliding click and drag.

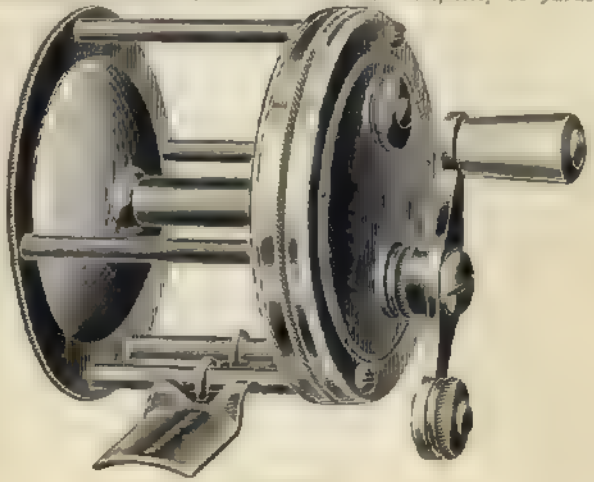
No. 2906PN. Capacity 60 yards, per dozen $8 00
No. 2907PN. Capacity 80 yards, per dozen 9 00



Double Multiplying

Light rubber sliding click. Adjustable drag. Balanced handle, steel pinion. Polished steel pivots. Housed bearings.

No. 36. Capacity 60 yards, per dozen ..... $ 2 00
No. 37. Capacity 80 yards, per dozen 12 50



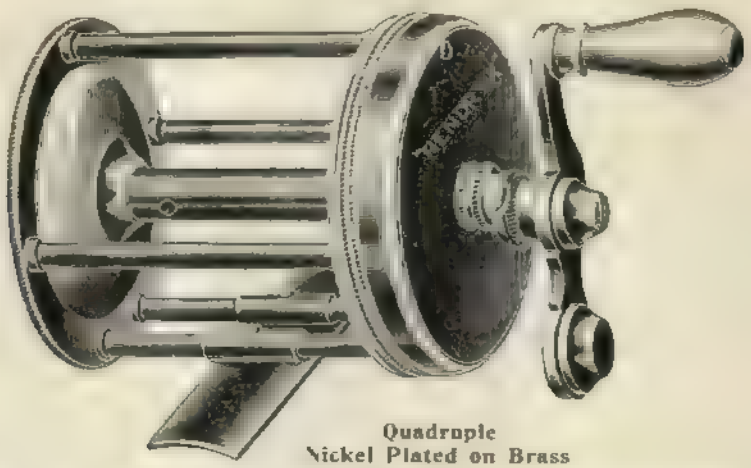
Quadruple

No. 924. Capacity 40 yards, per dozen ..... $ 9.00
No. 926. Capacity 60 yards, per dozen 10 00
No. 927. Capacity 80 yards, per dozen 12.00

No. 14. Capacity 60 yards, 2 in. disk steel pinion, adjustable drag and sliding click, per dozen $14.00

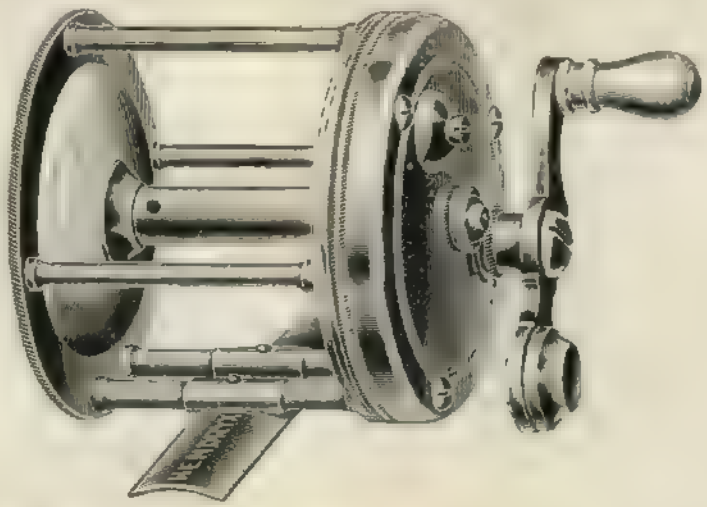
FISHING REELS

HENDRYX



Quadruple
Nickel Plated on Brass

No. 2240J. Capacity 80 yards, Kentucky pattern, extra heavy fine quality jewel bearings, take apart ..... per dozen, $44 00
No. 240. Capacity 80 yards, disc 2 in., pillars 1 5/8 in. ..... per dozen, $60 00
No. 40N. Capacity 80 yards, disk 2 in., extra wire spool, cut casting, steel pivots, all metal parts nickel plated ..... per dozen, 25.00
No. 4. Capacity 60 yards, otherwise same as No. 40N ..... per dozen, 22 00
No. 1240J. Capacity 60 yards, with jewel bearings, otherwise same as No. 4 ..... per dozen, 40.00



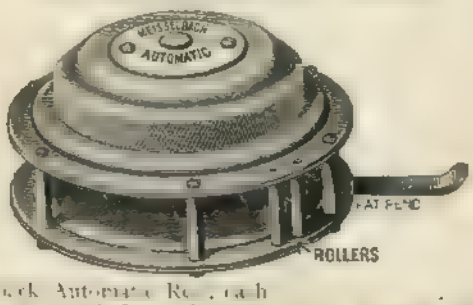
This reel is made with a solidly riveted frame, eliminating the possibility of loose pillars or set screws. Can be taken apart by turning the slot head eccentric rivets in back frame. Made with the best quality steel pinion and polished steel pivots running in polished bearings, extra wide spool, tusk ivory handle, patent adjustable drag and sliding click.

Extra Fine Quadruple Bait Casting Reel, Nickel Plated

No. K44. 80 yards, disk 2 in. diameter, pillar 1 5/8 in. long ..... per dozen $60 00
No. 2240. 80 yards, disc 2 in. diameter, pillar 1 5/8 in. long ..... per dozen $84 00

Extra heavy, fine quality, quadruple bait casting reel with wide spool extended steel pivots, steel pinion in pinion cover. Pivots running in hard bushed bearings, counter balanced crank, tusk ivory handle, patent adjustable drag, sliding click. All metal parts heavily nickel plated.

MEISSELBACH AUTOMATIC REEL



Meisselbach Automatic Reel, each $3 50

Size of spool 3 in. diameter, 3/4 in., capacity 100 yards. All working parts are of hard brass and tempered steel, working in German silver bearings.

IMPROVED KELSO AUTOMATIC REEL

Kelso Automatic Reel, each $5 00

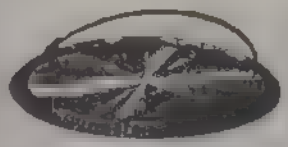
Will hold 100 yards, or a shorter line may be used with convenience. Weighs about 7 ounces.

STOVE GRIDDLES

NEVER-BREAK STEEL

Mirror Polished Steel, 14 Gauge

Raised Surface Prevents Cakes Burning on Bottom; batter will not stick to the polished surface; they are lighter than and not porous like Cast Iron, and do not become greasy, odorous or unsanitary.



NEVER-BREAK, HANDLED

Nos.	858	859	860
Size Nos.	8	9	10
Diam. Cooking Surface, In.	9	10	11
Weight Each, Lbs.	1¾	2¼	3¼
Each	$0.60	.70	.80

NEVER-BREAK, BAILED

Nos.	5912	5914	5916
Size Nos.	12	14	16
Diam. Cooking Surface, In.	12	13	14
Weight Each, Lbs.	3¾	4¼	4¾
Each	$1.00	1.15	1.30

TRIUMPH, CAST IRON

White Enameled Inside

Sanitary, Batter will not stick, Easily Cleaned

TRIUMPH, HANDLED

Nos.	188	189
Size Nos.	8	9
Diam., In.	10	11
Weight Each, Lbs.	2¾	3½
Each	$0.27	.30

TRIUMPH, BAILED

Heavy Coppered Rails

Nos.	1812	1814	1816
Size Nos.	12	14	16
Diam., In.	13½	15	17
Weight Each, Lbs.	5	5½	8
Each	$0.50	.65	.80

ERIE, HANDLED

Nos.	486	489
Size Nos.	8	9
Top Diam., In.	9¼	10¼
Weight Each, Lbs.	3	3¾
Each	$0.40	.48

COMMON, CAST IRON

Ground Inside

ERIE, BAILED

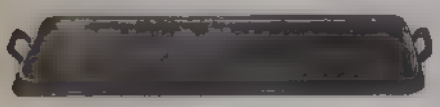
Nos.	4912	4914	4916
Size Nos.	12	14	16
Top Diam., In.	13¼	13¾	13½
Weight Each, Lbs.	5½	7	11
Each	$0.70	.90	1.10

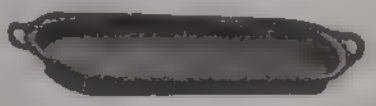
COMMON, HANDLED

Nos.	388	389
Size Nos.	8	9
Diam., In.	10	11
Weight Each, Lbs.	2¼	3
Each	$0.27	.30

COMMON, BAILED

Nos.	3912	3914	3916
Size Nos.	12	14	16
Diam., In.	13¼	15	17
Weight Each, Lbs.	4½	5	5½
Each	$0.50	.65	.80





ERIE, CAST IRON

Extra Finished, Polished Top, Raised Bottom

Nos.	478	479
Size Nos.	8	9
Size, In.	8½x19	9½x21
Weight Each, Lbs.	5½	7½
Each	$0.72	.90

LONG SHALLOW GRIDDLES, UNGROUND

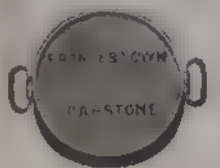
Griddles or Long Pans, Often used as Sad Iron Heaters; Not Ground

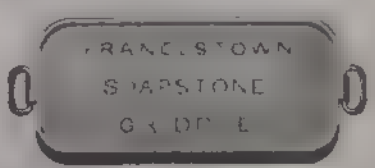
Nos.	378	379
Size Nos.	8	9
Size, In.	10½x20½	11½x21½
Weight Each, Lbs.	6¼	8
Each	$0.60	.75

EXTRA LARGE, CAMP GRIDDLES

Smooth Finished but not Ground

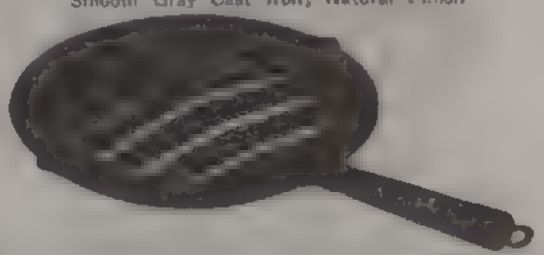
Nos.	3710
Size Nos.	10
Size, In.	11x20
Weight Each, Lbs.	17
Each	$3.75





BROILERS

Smooth Gray Cast Iron; Natural Finish



Bound with Galvanized Steel, Wired Rim, Wire Handles

Retain Heat Longer than Iron; do not get too Hot. Give no Odor of Grease (never use Grease on these Griddles) and are easily kept clean. Also make an Excellent Foot Warmer for Floor or Bed.

ROUND SOAPSTONE

Nos.	610	612	614
Diam., In.	10	12	14
Weight Dozen, Lbs.	72	100	135
Per Dozen	$8.75	12.50	16.25

OBLONG SOAPSTONE

Nos.	618	620
Size, In.	9x18	10x20
Weight Dozen, Lbs.	130	150
Per Dozen	$15.00	18.75

Heat Well Before Attempting to Bake, to Clean, Burn Salt on Griddle and Brush with a Dry Cloth, while hot.

All Above, Open Stock

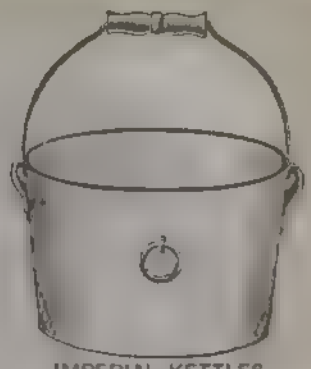
Each

No. 1—Diameter at Top 11 inches, Double Lipped, Ebonized Handle, [illegible] with Ring to hang up; Polished Metal Ferrule; smoothly Finished $0.70
Weight 3½ Lbs. Each

STOVE HOLLOW WARE

Seamless, Tinned Inside and Outside

Will not S[illegible] Fr[illegible]



NEVER-BREAK STEEL KETTLES

Flat Bottom, Straight Sides

Nos.	518S	519S
Stove Sizes	8	9
Quarts, Listed Capacity	9	13
Diam. Top, In.	9¾	10¾
Height, In.	7¾	8¼
Weight Each, Lbs.	6	6
Each	$1.75	2[illegible]

Round Bottom, Flaring Sides

Nos.	578F	579F
Stove Sizes	8	9
Quarts, Listed Capacity	9	13
Diam. Top, In.	9¾	10¾
Height, In.	7¾	8¼
Weight Each, Lbs.	5	6
Each	[illegible]	2.00

IMPERIAL KETTLES

Enameled [illegible] Inside Gray with Blue Outside, Flat Bottom

Nos.	191	191
Stove Sizes	8	9
Quarts, Listed Capacity	9	13
Diam. Top, In.	10⅝	11¼
Height, In.	7	7⅞
Weight Each, Lbs.	8½	9
Each	$1.05	1.05

Flat Bottom

Round Bottom

ERIE KETTLES

Extra Finished, Smooth and Easily Cleaned; all sizes have Side Handle

Flat Bottom

Nos.	418	419
Stove Sizes	8	9
Quarts, Listed Capacity	9	13
Diam. Top, In.	10¾	11¼
Height, In.	7¼	8
Weight Each, Lbs.	9½	10
Each	$1.04	1.32

Round Bottom

Nos.	418R	419R
Stove Sizes	8	9
Quarts, Listed Capacity	9	13
Diam. Top, In.	10¾	11¼
Height, In.	7¼	8
Weight Each, Lbs.	9½	10
Each	$1.00	1.30

Trimph

Common

TRIUMPH KETTLES

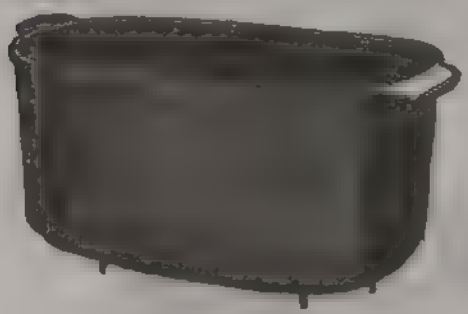
Enameled Lined Round Bottom Iron Bail Will Not Scale

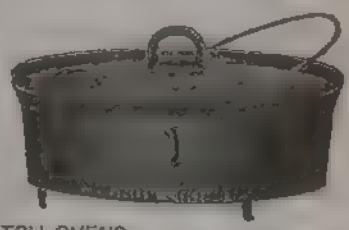
Nos.	118	119
Stove Sizes	8	9
Quarts, Listed Capacity	9	13
Diam. Top, In.	10⅛	11¼
Height, In.	8	8¾
Weight Each, Lbs.	9	10
Each	$0.70	.85

COMMON KETTLES

Ground Inside; Round Bottom; Coppered Bail

Nos.	318	320
Stove Sizes	8	10
Quarts, Listed Capacity	9	13
Diam. Top, In.	10¼	11¾
Height, In.	7¾	8
Weight Each, Lbs.	8	12
Each	$0.70	.85	1.00





CAST BAKE OR DUTCH OVENS

W[illegible] Center of Food without Injury to Contents; has Deep Countersunk Cast Iron Cover which [illegible] closely, and on which Live Coals are Placed; Natural Finish Inside, Japanned Outside.

DEEP

Nos.	Diam., In.	Depth, In.	Weight, Lbs.	Each
3D	10	4½	11½	$1.30
2D	11	4½	13½	1.40
1D	12	5	17	1.75
0D	14	5½	23	2.50
00D	16	6½	32	3.00

SHALLOW

Nos.	Diam., In.	Depth, In.	Weight, Lbs.	Each
4	9	2½	7	$1.10
3	10	3	10	1.20
2	11	3	11½	1.30
1	12	3	15	1.50

All above, Open Stock

HAM BOILERS

Cast Iron, Unground, Pit Bottom

Nos.	7	8	9
Stove Sizes	7	8	9
Gallons, Listed Capacity	5¼	6	10½
Length, In.	20	22	24
Width, In.	11½	12½	13½
Height, In.	9	10	10½
Weight Each, Lbs.	20	25	30
Each	$1.90	2.25	2.50

STOVE HOLLOW WARE

ACME FRY PANS

Long Handle, Tin Shield, Always Cool; Very Light; Top 1½ in. Wider than Bottom

Nos	49	50	51	52	53
Size Nos.	00	0	1	2	3
Top, In.	6	6	8½	9¼	10
Depth, In.	1⅝	1¾	1¾	1¾	1¾
Wt. Doz., Lbs.	8	9	10	12	13
Per Dozen	$2.50	3.00	3.75	4.25	4.75

Nos.	54	55	56	57
Size Nos.	4	5	6	7
Top, In.	10½	11	12	13¼
Depth, In.	2	2	2⅛	2⅛
Weight, Doz. Lbs.	15½	18	22	27
Per Dozen	$5.25	6.00	7.00	8.00

LAND LOOKERS' FRY PANS

With Socket to insert Long Handle

Suitable for Contractors, Campers, Prospectors, etc.

Top 1⅜ in. Wider than Bottom

Nos.	0	1	2	3
Top, In.	7⅝	8½	9	9⅝
Depth, In.	1½	1¾	1¾	1¾
Weight Doz., Lbs.	8	10	12	13
Per Dozen	$4.20	4.80	5.40	6.00

ACME STEEL SPIDERS

Double Lipped; Seamless Polished Steel; Cold Handles

Nos.	70	80	90	100
Depth, In.	2	2	2	2
Weight Doz. Lbs.	15	21	24	30
Diam. Top, In.	9	10½	11	12½
Per Dozen	$3.50	3.75	4.25	6.00

SPIDERS

Double Lipped, Flaring Sides. All 2 In. Deep. Top 1½ in. Wider than Bottom

NEVER-BREAK, STEEL SPIDERS

Mirror Polished, Seamless Steel, 14 Gauge, Hollow Handle, Heavy Re-Annealed Bottom Prevents Twisting Out of Shape

Nos.	557	558	559	560	561
Size Nos.	7	8	9	10	12
Bot. Diam., In.	8	9	10	11	12
Wt. Each, Lbs.	3	3	3½	4	5
Each	$0.65	.75	.90	1.10	1.30

TRIUMPH CAST IRON SPIDERS

Enameled White Inside

Nos.	158	159
Size Nos.	8	9
Bottom Diam., In.	9	10
Weight Each, Lbs.	4½	5
Each	$0.35	.40

ERIE EXTRA FINISHED SPIDERS

Cast Iron, Polished Inside

Nos.	458	459
Size Nos.	8	9
Bottom Diam., In.	9	10
Weight Each, Lbs.	4	4¼
Each	$0.50	.58

COMMON SPIDERS

Cast Iron, Ground Inside

Nos.	358	359	360
Size Nos.	8	9	10
Bottom Diam., In.	9	10	11
Weight Each, Lbs.	3¼	4½	5½
Each	$0.35	.40	.50

Sizes 8, 9 and 10 will fit in Stove Holes of Same Number

Open Stock

STEEL FRYERS

For Frying Potatoes, Oysters, Croquettes, Doughnuts, Etc.

HEAVY STEEL FRYERS

Nos.	10	12	14
Depth, In.	2	2	2
Diam., In.	10	12	14
Weight Each, Lbs.	3½	4½	6¼
Each	$1.80	2.20	2.70

Made of Heavy Smooth Steel with Wrought Iron Riveted Steel Hanging Bail. Bright Wire Food Receptacle, ⅜ in. Mesh; Heavy Wire Bail made of 3 Strands No. 9 Tinned Wire.

Nos.	114	116
Diam., In.	14	16
Depth, In.	6	6½
Height Overall, In.	19¼	21¾
Weight, Bail, Lbs.	9¼	11¼
Each	$6.00	9.30

WAFFLE IRONS

AMERICAN

Cast Iron, Japanned Rim; Black Enameled Wood Handles; Top and Bottom Molds are Detachable; Opens either Side

Revolves on Knob, shown at left side

Deep Ring

Per Dozen

No. 9D—Especially for Gas or Gasoline Stoves, Pans can be turned without lifting. For Stoves Nos. 8 or 9. Diam. of Pan 7⅞ in., Diam. of Rim 11¼ in.; Height 4 in. $10.00

Weight 125 Lbs. per Dozen

Low Ring

Cast Iron, Japanned Rim; Black Enameled Wood Handles, Top and Bottom Molds are Detachable; Opens either Side

Nos.	8	9
For Stoves	8 or 9	9 or 10
Diam. Pan, In.	7¼	8¼
Diam. Rim, In.	9⅞	10⅞
Weight Dozen, Lbs.	96	108
Per Dozen	$16.00	18.00

All Above, Open Stock

COMMON, REVOLVING

Cast Iron Japanned Rim

Revolves (turns over) by pushing downward quickly, near Rim of Molds, opens at either side

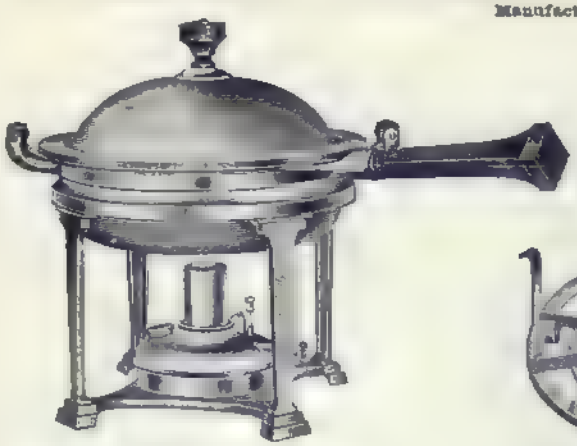
Nos.	80	90
For Stoves	8 or 9	9 or 10
Diam. Pan, In.	7¼	8¼
Diam. Rim, In.	9¼	10¼
Weight Dozen, Lbs.	84	90
Per Dozen	$10.80	12.00

"Universal" Chafing Dishes

Legs, Base and Handle Sockets are of cast brass. Insides of Food and Water Pans are heavily coated with pure tin. Non-heating Ebonwood Handles in natural finish.

In every detail of design and construction the "Universal" embodies in copper the distinction of the finest sterling. More than that, it has a stove that makes it as easy to cook in as on a gas range.

Manufactured by Landers, Frary & Clark.



Capacity 3 Pints.

Equipped with "Universal" Hot Blow-Flame Alcohol Stove

No. 900C	Copper	Each	$26.10
No. 900N	Nickel plated	Each	26.10
No. 900S	Silver plated	Each	36.00

CHAFING DISH GRATE.

May be suspended in the stand of any "Universal" Chafing Dish after the food and hot water pans are removed.

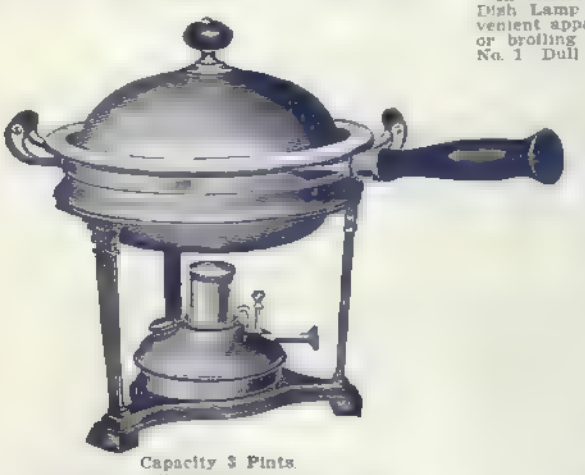
In connection with the "Universal" Chafing Dish Lamp this Grate provides a most convenient apparatus for boiling, stewing, frying or broiling.

No. 1 Dull Nickel.....Each $1.10

Capacity 3 Pints.

Equipped with "Universal" Hot Blow-Flame Alcohol Stove

No. 740C	Copper	Each	$24.90
No. 740N	Nickel plated	Each	24.90
No. 740S	Silver plated	Each	32.70



Capacity 3 Pints.

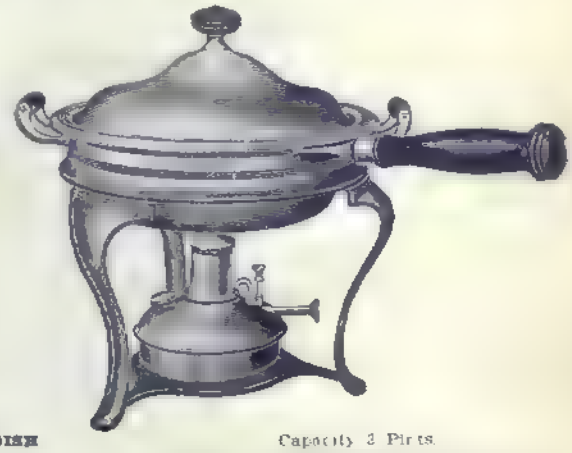
Equipped with "Universal" Hot Blow-Flame Alcohol Stove

No. 700C	Copper	Each	$25.70
No. 700N	Nickel plated	Each	25.70
No. 700S	Silver plated	Each	32.80

"UNIVERSAL" CHAFING DISH SPOONS AND FORKS

No. 410 Silver plated fork and spoon. Non-heating, ebonized wood handles. Total length, 11½ inches .....Each $3.90

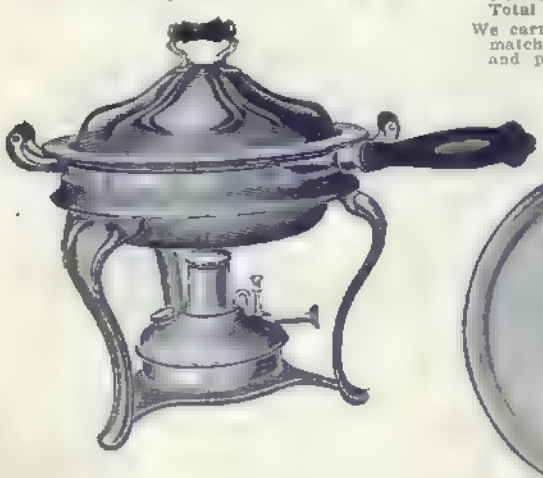
We carry in stock, however, numbers to match all patterns of Chafing Dishes and prices are.....Each $3.90



Capacity 3 Pints.

Equipped with "Universal" Hot Blow Flame Alcohol Stove

No. 600C	Copper	Each	$20.90
No. 600N	Nickel plated	Each	20.90
No. 600S	Silver plated	Each	30.20



Capacity 3 Pints.

Equipped with "Universal" Hot Blow-Flame Alcohol Stove

No. 800C	Copper	Each	$19.75
No. 800N	Nickel plated	Each	19.75
No. 800S	Silver plated	Each	29.10

CHAFING DISH TRAYS ONLY

Made of heavy gauge solid copper, satin finished back and center polished border

12-inch Round Trays.

No. 112C	Copper	Each	$ 4
No. 112N	Nickel plated	Each	5
No. 112S	Silver plated	Each	7

14-inch Round Trays

No. 14S	Silver plated	Each	7.10
No. 14	Copper	Each	$3.90
No. 14N	Nickel plated	Each	2.90

Capacity 3 Pints.

Equipped with "Universal" Hot Blow-Flame Alcohol Stove

No. 100C	Copper	Each	$ 1.00
No. 100N	Nickel plated	Each	1.00
No. 100S	Silver plated	Each	1.00

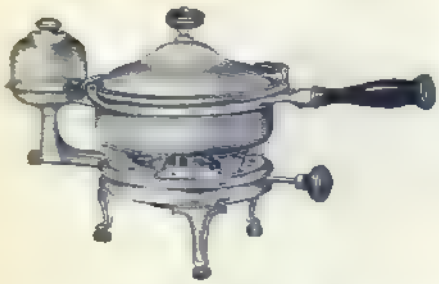
We Fill All Orders Promptly

Our One Aim is to PLEASE

"UNIVERSAL" ALCOHOL GAS STOVE CHAFING DISHES

Insure the rapid and thorough cooking of a substantial meal. Is safe, efficient and easily operated as an ordinary gas range, is artistic in design, superb in finish and solidly built for service. Stove made of brass heavily nickel plated to match chafing dishes, Handles and knobs of non-heating Ebonwood in natural finish and Genuine Buck Horn.

Manufactured by Landers, Frary & Clark

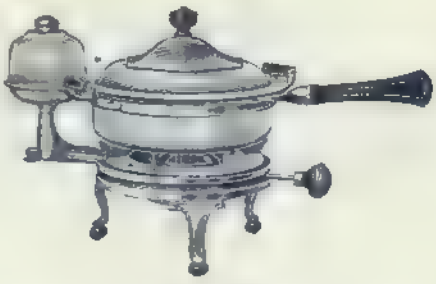


No. 661.

Stove and Lamp Nickel Plated and Highly Polished. Complete $24.00.

No. 960.

Stove and Dish Nickel Plated and Highly Polished. Complete, $28.00.

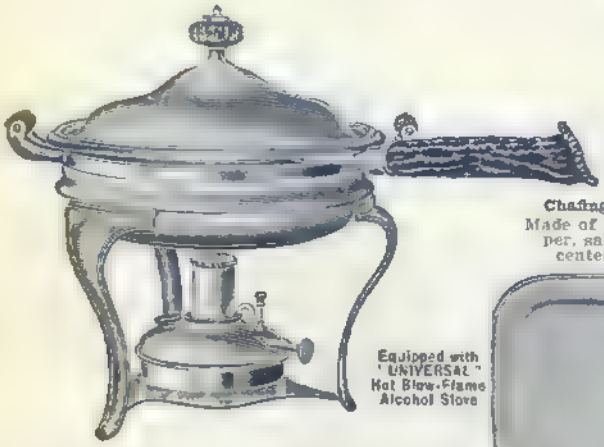


No. 460.

Stove and Dish Nickel Plated and Highly Polished. Complete, $28.80

"Universal" Chafing Dishes with Extra Fine Selected Genuine Buck Horn Handles

Capacity Three Pints



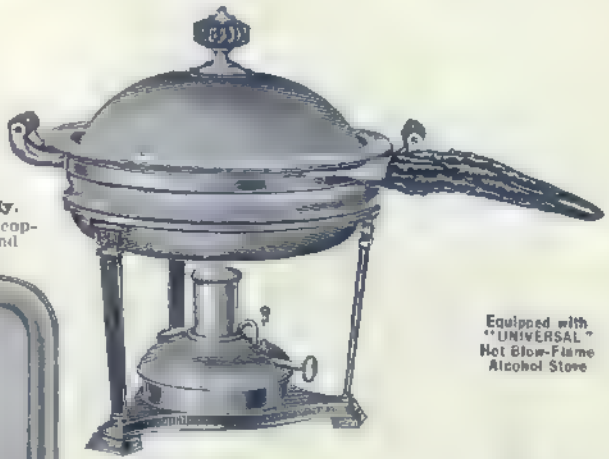
Equipped with "UNIVERSAL" Hot Blow-Flame Alcohol Stove

No. 0602C Copper .....Each $7.35
No. 0602N Nickel plated .....Each $27.35
No. 0602S Silver plated .....Each 36.20

Chafing Dish Trays Only.

Made of heavy gauge solid copper, satin finished back and center, polished border

No. 114N 10x14-in. tray, nickel plated, each.....$5.35
No. 114C 10x14-in. tray, copper, each.....5.
No. 114S 10x14-in. tray, silver plated, each.....8.



Equipped with "UNIVERSAL" Hot Blow-Flame Alcohol Stove

No. 0701C Copper .....Each 23.55
No. 0701N Nickel plated .....Each 28.55
No. 0701S Silver plated .....Each 38.05

Equipped with "UNIVERSAL" Hot Blow-Flame Alcohol Stove

Four Piece Set.

Consisting of Chafing Dish, Fork and Spoon and 14-inch Round Tray. Handles and knobs of beautifully marked stag. Spoons and forks always silver plated.

No. 0802-4C Copper .....Complete Set $43.10
No. 0802-4N Nickel plated .....Complete Set 43.10
No. 0802-4S Silver plated .....Complete Set 55.90
No. 0802C Copper .....Dish Only 26.40
No. 0802N Nickel plated .....Dish Only 26.40
No. 0802S Silver plated .....Dish Only 36.00

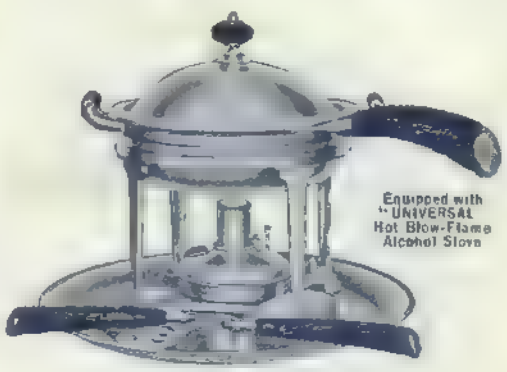
14 Inch Round Trays.

No. 14C Copper .....Each $3.90
No. 14N Nickel plated.....Each 3.90
No. 14S Silver Plated.....Each 7.10
No. 2 Chafing Dish Fork and Spoon.....Each $6.40

CHAFING DISH FORKS AND SPOONS

No. 1.

Chafing Dish Fork and Spoon. Each, $5.60.



Equipped with "UNIVERSAL" Hot Blow-Flame Alcohol Stove

Four Piece Set.

Consisting of Chafing Dish Fork and Spoon and 14-inch Round Tray. Handles and knobs of beautifully marked stag. Sterling silver caps. Spoons and forks always silver plated

No. 0903-4C Copper .....Complete Set $51.10
No. 0903-4N Nickel plated .....Complete Set 51.10
No. 0903-4S Silver plated .....Complete Set 65.90
No. 0903C Copper .....Dish Only 32.80
No. 0903N Nickel plated .....Dish Only 32.80
No. 0903S Silver plated .....Dish Only 42.40

14 Inch Round Trays.

No. 14C Copper .....Each $3.90
No. 14N Nickel plated .....Each 3.90
No. 14S Silver Plated. .....Each 7.10
No. 2 Chafing Dish Fork and Spoon.....Each $7.30

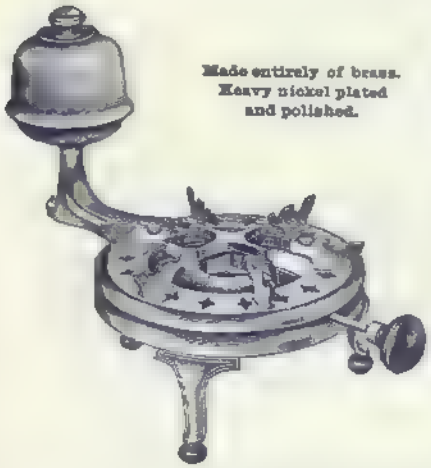
"Universal" Denatured Alcohol Gas Stoves (Wickless Burners)

For Kitchen, for Boats, for Dining Room, Den or Side Board

Denatured alcohol is clean, odorless and inexpensive. In these stoves it is converted into a gas and burns with an intensely hot blue flame. The burners are made of cast brass. The generator is made of straight seamless brass tubing. Inside of this is a patented filter cartridge, made of a cluster of brass wires, which regulates the flow of alcohol. Nothing to wear out or replace. Safe, efficient and reliable

For Dining Room, Den, Sideboard or Boat

Manufactured by Landers, Frary & Clark.



Made entirely of brass. Heavy nickel plated and polished.

At 50 cents per gallon Denatured Alcohol is cheaper than coal at $6.00 per ton.

Diameter, 8¼ inches.
Total height, 10½ inches.
Capacity of Fount, 1 pint.

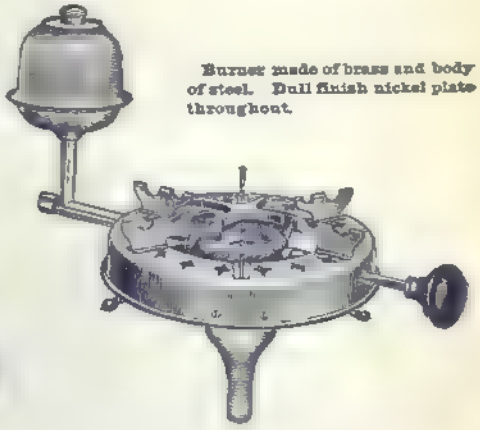
No. 600N .....Each $13.70

Made entirely of brass heavily nickel plated and polished.

With railing to prevent cooking vessels from sliding off.

Diameter, 8¼ inches.
Total height, 10½ inches.
Capacity of Fount, 1 pint.

No. 1600 ..... Each $15.75



Burner made of brass and body of steel. Dull finish nickel plate throughout.

Diameter, 8⅝ inches
Total height, 9⅞ inches
Capacity of Fount, 1 pint

No. 610 ..... Each $8.00

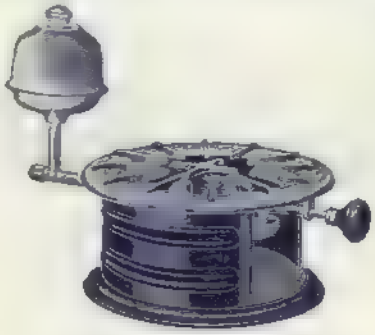
"UNIVERSAL" ALCOHOL STOVES.
(Wick fed.)

These two models burn with the famous blow-flame—blue and intensely hot. They boil a quart of water at 50 degrees Fahrenheit in less than six minutes. These stoves burn denatured alcohol and generate gas. Easy to light, easy to regulate. Both patterns are equipped with wind shield to permit their use out of doors.

FOR KITCHEN, SUMMER COTTAGE OR CAMP.

The burners and tanks are of brass. These stoves have 3 legs. These are the grate are fastened and detachable. The frames are substantially made of japanned sheet steel and protect the flames from currents of air.

Will accommodate ordinary cooking utensils and regular gas stove ovens.



No. 10 Single Burner.
Diameter of grate, 10¾ inches.
Height, 5 inches.
Extreme height, 10¾ inches.
Capacity of Fount, 1 pint.

Each $8.90

No. 20 Double Burner.
Length, 21½ inches. Breadth, 13¾ inches.
Height, 6¼ inches.
Extreme height 13¼ inches.
Capacity of tank, 2 quarts.

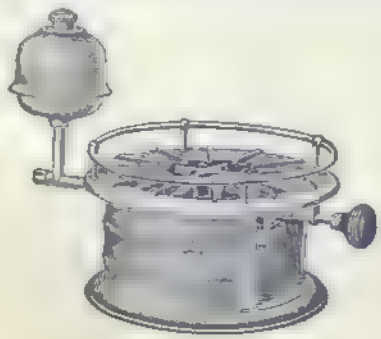
Each $17.75

Height, 6¼ inches.
Diameter, 6¾ inches

No. 0N Nickel plated throughout..... $4.50
No. 0C Copper finish 4.50
Capacity, 1 pint

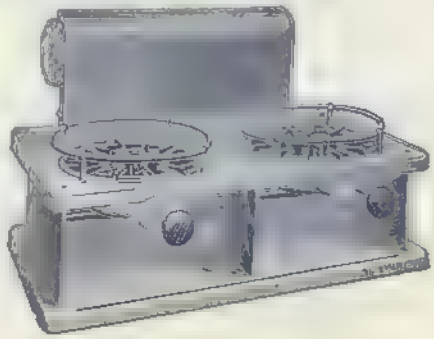
FOR KITCHEN, SUMMER COTTAGE, CAMP OR BOAT.

The burners and tanks are made of brass, finished in dull nickel. The frames are substantially made of sheet steel, heavily galvanized to withstand the action of salt water and moist air. Equipped with brass railing to prevent cooking vessels from sliding off.



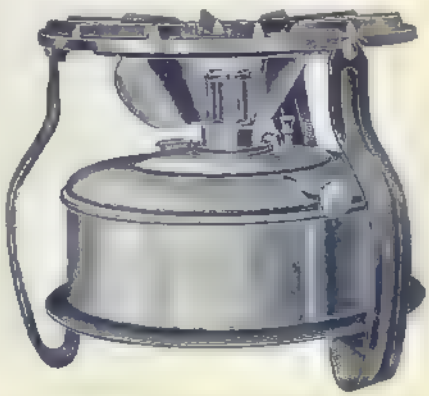
No. 120 Single Burner
Diameter of grate 10¾ inches
Height 5 inches.
Extreme height, 10¾ inches
Capacity of Fount, 1 pint.

Each $10.75



No. 140 Double Burner
Length 21½ inches Breadth 13¾ inches
Height 6¼ inches
Extreme height 13¼ inches
Capacity of Tank, 2 quarts.

Each $21.50



No. 1 Height 7 inches Diameter 7 inches.
Capacity of Tank, 3 pints
Tank made of brass, nickel plated. Frame is wrought iron japanned. Each $6.50

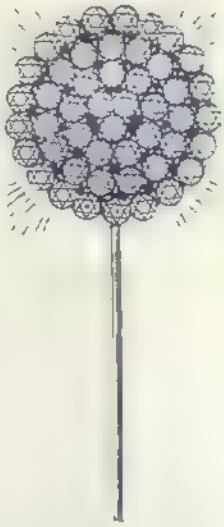
Latest and Most Popular Styles in Ladies' Hat Pins

PRICES EACH.

Highest grade gold filled Roman finish, raised ornaments, scroll effect, dome shape
No. 9043 ..... $3.50

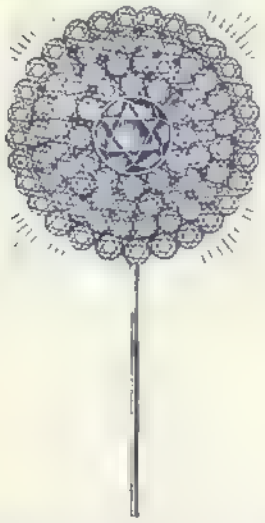
High grade gold filled Roman finish, open work, set with 10 fine amethysts
No. 9044 ..... $2.50

Sterling silver mounting set with best quality brilliants.
No. 9045 ..... $4.50

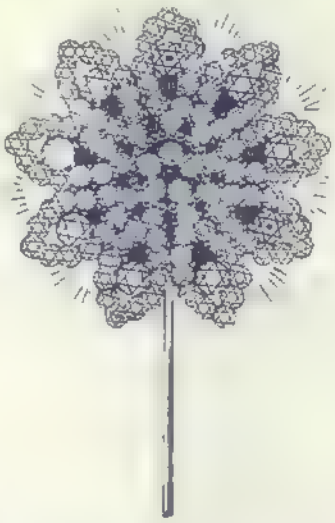


Silvered mounting, set with fine brilliants.
No. 9046 ..... $1.50

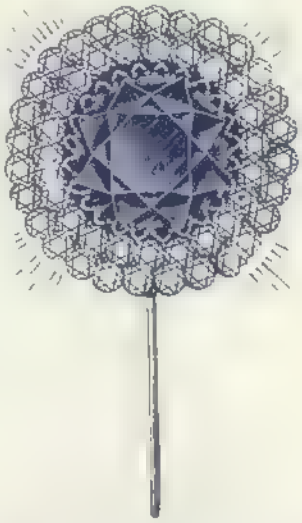
Silvered mounting, pearl center, surrounded with brilliants
No. 9047 ..... $0.90



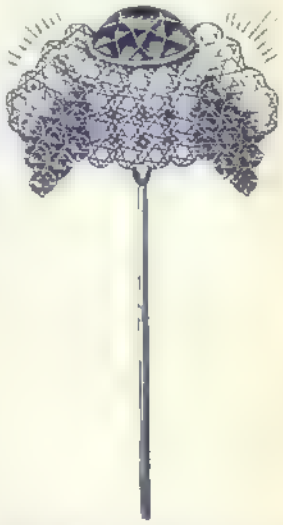
Silvered mounting, one large brilliant stone center, surrounded by best quality brilliants.
No. 9048 ..... $4.00



Silvered mounting, set with the best quality brilliants.
No. 9049 ..... $3.25



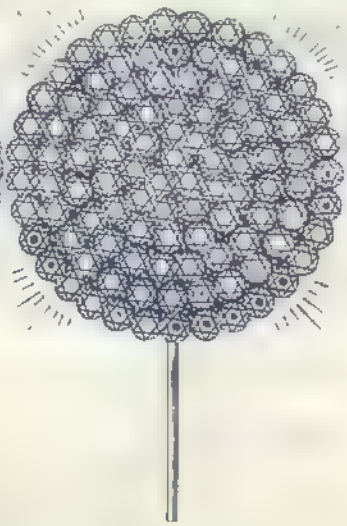
Silvered mounting, fine amethyst center, surrounded by fine brilliants
No. 9050 ..... $2.00



Silvered mounting, fine emerald center, surrounded by fine brilliants and [illegible]
No. [illegible] $4.75

Silvered mounting, dome shape, set with fine brilliants
No. 9052 ..... $2.75

Silvered mounting, fine amethyst center surrounded by the best quality brilliants.
No. 9053 ..... $5.25



Silvered mounting. Set with the best quality brilliants
No. 9054 ..... $3.50

Silvered mounting, fine topaz center surrounded by the best quality brilliants
No. 9055 ..... $5.25

Latest and Most Popular Styles in Ladies' Hat Pins

PRICES EACH.

Fine gold filled, rose gold finish, open work, polished signet top.

No. 9023 .. .$1.10

High grade gold filled, rose gold finish open work Roman signet top bright cut edge.

No. 9024 ....$1 50

High grade gold filled. Roman top polished signet top.

No. 9025 .. $1 50

Fine gold filled, English finish, open work polished signet top.

No 9026 ....$0 90

Fine gold filled, English finish, open work signet top.

No. 9027. ...$1 10

High grade gold filled, rose gold finish, carved, open work raised English finish signet top.

No. 9028.....$1 50

Fine black jet, rolled plate pin

No. 9029 .....$0 80

Fine gold filled, green and rose gold finish open work Roman finish polished top

No 9030 $1 50

High grade gold filled, rose gold finish open work polished signet top

No 9031 $2 10

Highest grade gold filled, English finish open work, beveled edge signet top

No. 9032.....$2 75

Highest grade gold filled, English finish open work beveled edge signet top.

No. 9033.. $2 75

Highest grade gold filled, green and rose gold finish open work polished signet top, bright cut

No. 9034. .. $2 00

Highest grade gold filled, English finish, with raised enameled etched feet.

No. 9035.... $2.60

High grade gold filled, Roman finish raised enamel on rolls, scroll effect.

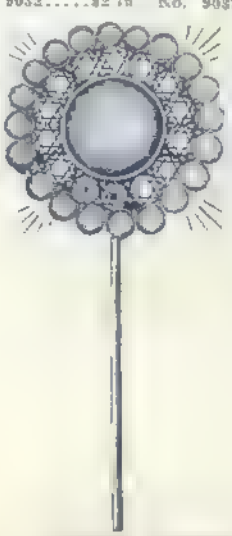
No. 9036.....$1 50

Sterling silver polished, open work, the amethyst stone top.

No. 9037.....$3.00

Sterling silver polished open work the blue sapphire stone top.

No. 9038.....$2.60



Silver-ed mounting, large oval center, 14 brilliants and 20 corals.

No. 9039.....$1.40

High grade gold filled, English finish open work, fine amethyst stone top.

No. 9040..... $2.00

Fine gold filled, rose gold finish open work the topaz stone top

No 9041.....$2 60

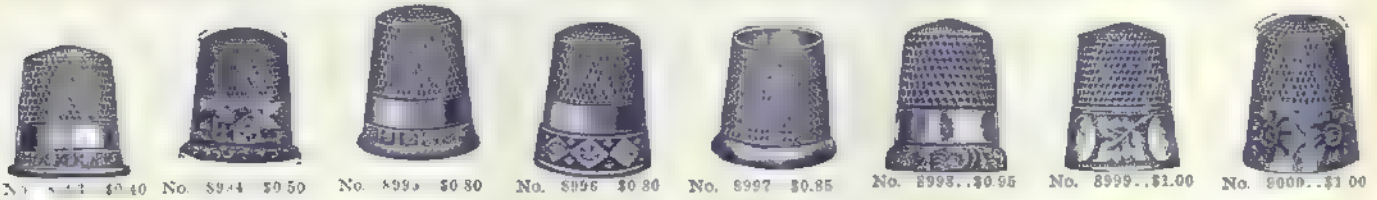
Highest grade gold filled, rose gold finish, open work 2 large emeralds and 12 brilliants

No. 9042 $2 75

Extra Quality 10K and 14K Solid Gold Thimbles — PRICES EACH

8977 10k..$5.35 8978 14k.. 7.25 | 8979 10k..$6.25 8980 14k. 8.00 | 8981 10k..$6.25 8982 14k.. 8.00 | 8983 10k $7.25 8984 14k.. 9.00 | 8985 10k.$ 8.00 8986 14k. 10.00 | 8987 10k $ 9.00 8988 14k 10.75 | 8989 10k $ 9.00 8990 14k. 10.75 | 8991 10k $10.00 8992 14k 1[illegible]

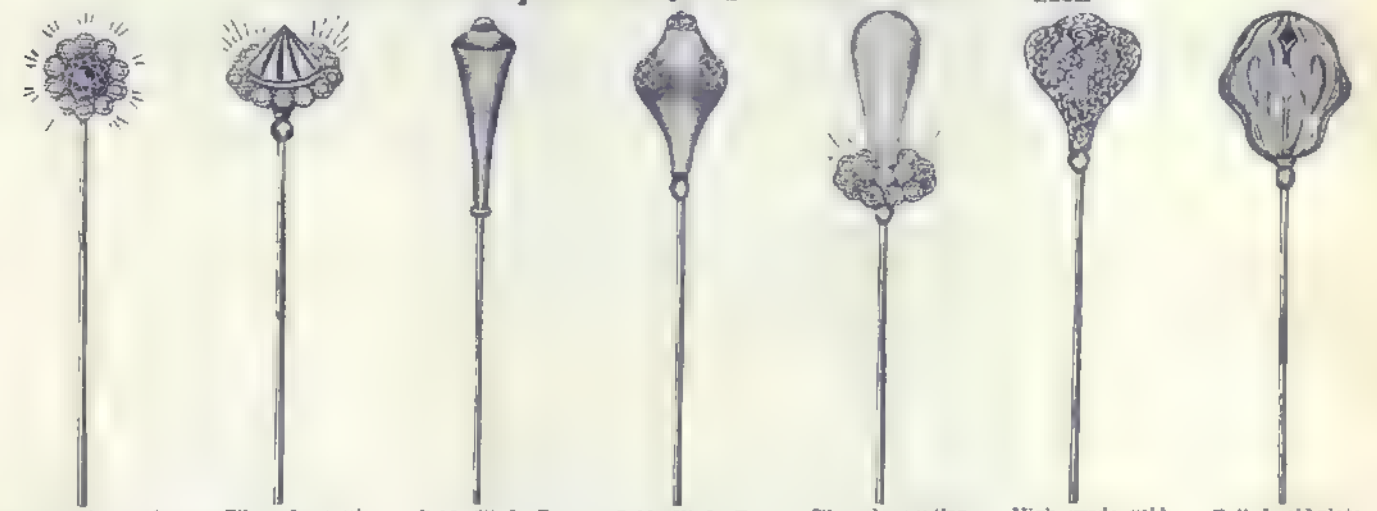
Extra Quality Sterling Silver, Gold Band and Gold Filled Thimbles — Prices Each



No. [illegible] $0.40 | No. 8994 $0.50 | No. 8995 $0.80 | No. 8996 $0.80 | No. 8997 $0.85 | No. 8998..$0.95 | No. 8999..$1.00 | No. 9000..$1.00

No. 9001..$1.10 | No. 9002..$1.10 | No. 9003..$1.20 | No. 9004. $1.40 | No. 90[illegible] $1.65 | No. 9006..$2.00 | Silver gold band. No. 9007 $3.00 | Gold filled. No. 9008..$3.50

Latest and Popular Styles in Hat Pins — Prices Each



Silvered mounting, amethyst center, 9 fine brilliants. No. 9009 ...$0.60

Silvered mounting, brilliant center, 13 fine brilliants. No. 9010 ...$0.85

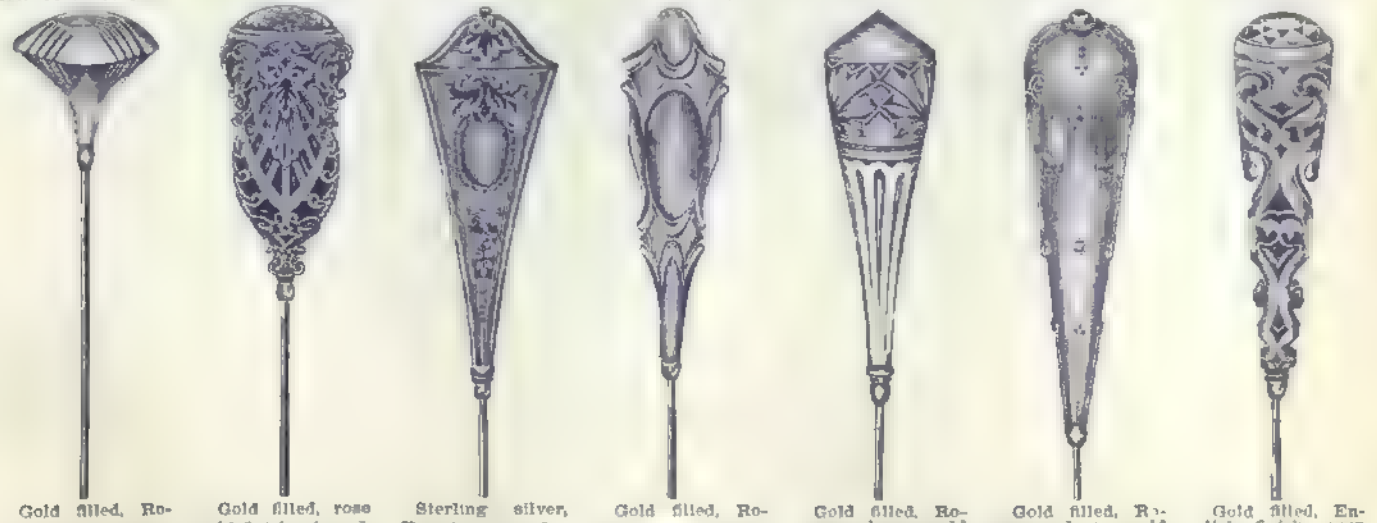
Gold filled, Roman finish. No. 9011.....$0.70

Gold filled, Roman finish, raised ornaments. No. 9012.... .$1.60

Silvered mounting pearl center, 13 fine brilliants. No. 9013.....$1.10

High grade gold filled, Roman finish, raised ornaments. No. 9014.... $2.10

Rolled gold plate, rose gold and Roman finish. No. 9015.... $0.60



Gold filled, Roman finish pierced No. 9016 $1.10

Gold filled, rose gold finish, pierced, coral st[illegible] No. 9017 $1.60

Sterling silver, French gray finish, embossed. No. 9018 $2.60

Gold filled, Roman finish, [illegible] No. 9019 . $1.10

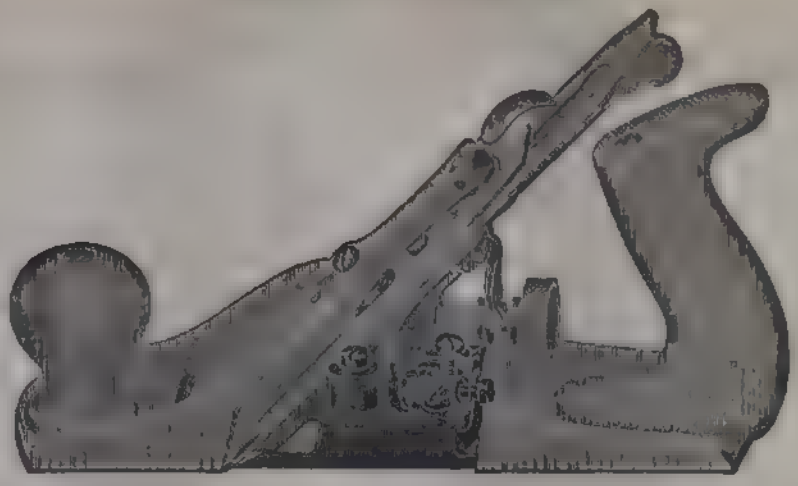
Gold filled, Roman and rose gold finish, [illegible] ornaments. No. 9020 $1.50

Gold filled, Roman and rose gold [illegible] 5 amethysts No. 9021 . $2.40

Gold filled, English finish, open work, [illegible] amethyst top. No. 9022 . $3.25

ZENITH PLANES

Zenith Planes have an Unconditional Guarantee



Cut Shows Patent Frog, Adjustable without Removing Cutter

All material used in the manufacture of Zenith Planes is of unquestionable excellence. This, together with high grade, expert workmanship and faultlessness of design make Zenith Planes perfect Planes.

The Plane Irons or Cutters are of the best Imported Sheffield Steel; high grade in quality and fine in texture, Hardened to a perfect degree of Temper. Each Cutter Edge is tested before being assembled, with a case hardened tool which is passed over it. Should the edge chip off or break it is discarded as too hard. If it fails to spring back, it is too soft. Castings are uniform in quality of material, smooth in finish, and without blow holes or flaws of any kind.

The Frog Seats on the body Castings are milled, as is also the bottom of the Frog. The Frog sets evenly and tightly in place. The Face of the Frog is milled, that the plane iron or cutter may be in contact with every point of the bearing surface at all times. With the cutter in place, though not tightened down, a sheet of tissue paper cannot be introduced, at any point, between it and the Face of the Frog.

All Castings are smoothed off and when not Japanned are Machine Finished and Polished.

The Lateral Adjustment Levers, which are found on all Bench Planes, are of Cold Rolled Steel, blanked out of a single piece, and die stamped to shape. They will not become bent or broken.

The Knuckle Joints on the so-called Knuckle Joint Planes are of Heavy Wrought Steel, made to withstand hard usage and heavy work without breaking or cracking. This part is heavily nickel plated and excellent in design. It is easily and quickly adjusted.

A Novel and Distinctive Feature of much importance to be found on Zenith Planes is the Eccentric Adjusting Device of the Adjustable Throat Plane. This device gives a positive adjustment to the mouth-piece. It consists of a Cast Eccentric Fitting over a Threaded Stud (attached to the mouth-piece), and held in place by the Thumb Nut of the Stud. In operation this is very simple, as it merely entails loosening the Thumb Nut and, with a slight twist of the eccentric, swinging the Throat Piece up or down to the exact position desired. When the Thumb Nut is tightened the mouth-piece is positively locked in position.

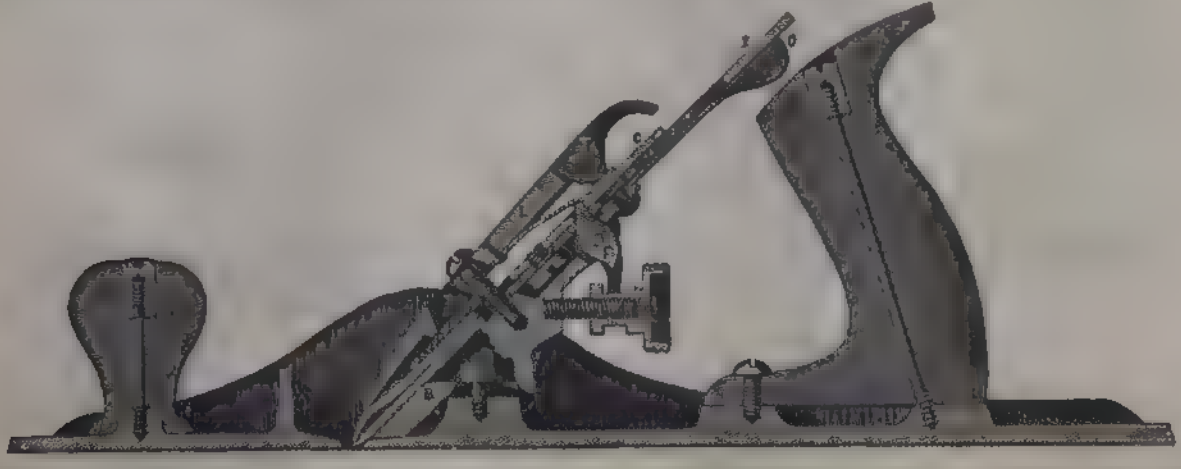
These are some of the things which go to make the Long Life and Perfect Working Qualities peculiar to Zenith Planes.

Then, too, the Mouth Piece of these Planes when opened to its fullest extent does not extend beyond the framework and cannot be driven back against the Cutter Edge by a sudden blow or through being dropped. The Eccentric Adjustment also safeguards against accidents of this sort.

The screw control of the up and down adjustment is a detail which shows with what thought these Planes are designed. It is composed of two parts, steel in the threaded portion where the wear comes and brass at the head where the moisture of the hands would rust steel.

The quarter-sawed, weather dried, Beech Wood used in all wood bottom Zenith Planes is carefully selected and weather dried for at least three years before being cut into blocks. It is also kiln dried for months until every possibility of a warp, crack or flaw of any kind showing up is removed. The stock is quarter-sawed to give a clean straight grain running the length of the block and parallel to the direction of the tool cut. This also gives a perfect wearing surface to the bottom.

All Handles and Thumb Knobs on the Iron Planes are of selected East Indian Mahogany, making these parts an unusually durable and attractive feature of the Zenith Planes.



Showing details of Zenith Planes: (I) Plane Iron, made of best double refined English Steel. (C) Steel Cap adjusted by Screw (S) to Plane Iron and held firmly in place by depressing Cam Thumb Piece (T) on Lever (L). The thickness of the shaving is regulated by a turn of the Thumb Nut (N) acting through the Forked Lever (F). The cutting edge of the Plane Iron is accurately adjusted to the face of the Plane by means of the One Piece Stamped Steel Lever (O). The Bed Piece (B) can be moved backward or forward to increase or decrease the mouth opening and is locked in place by the Screw (W).

ZENITH PLANES

VENEER SCRAPERS

For Scraping and Finishing Veneers or Cabinet Work, Removing Old Paint, Etc., etc.

	Each
No. Z112—9 in. Long; 3 in. Cutter; Polished Bottom, Nickeled Trimmings, Japanned Inside; Polished Rosewood Handle and Knob	$0 60

Weight 1½ Lbs. Each

Polished Finish, Double Cocobolo Handle; the Wood Face Plane is particularly adapted for Stair Makers' and Floor Finishers' Use.

	Each
No. Z12 —6½ in. Long, 3 in. Cut	$1 40
No. Z12½—6½ in. Long, 3 in. Cut, Wood Face	2 00

Average Weight 3½ Lbs. Each

One in a Box

ZENITH PLANE PARTS

Part Nos. FOR BENCH PLANES

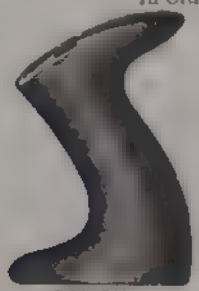
1—Single Steel Cutter
2—Single Steel Cutter
1 & 2—Double Steel Cutter
3—Cap Screw
4—Clamp
5—Clamp Screw
6—Frog Complete
7—Frog Adjustment
8—Brass Adjusting Nut
9—Lateral Adjustment
10—Frog Screw
11—Handle
12—Knob
13—Handle Bolt
14—Knob Bolt
15—Handle Screw (Iron)
16—Bottom (Iron)
17—Bottom (Wood)
18—Top Casing (Wood)
19—Adjusting Screw (Iron)

Part Nos. FOR BLOCK AND MISCELLANEOUS PLANES

18—Top Casing
22—Adjusting Lever
24—Cap
25—Clamp
26—Adjusting Screw
27—Sole
31—Steel Cutter
34—Clamp
35—Clamp Screw
36—Bottom
37—Adjusting Lever
38—Adjusting Nut
39—Lateral Adjustment
40—Mouth Piece
41—Knob
42—Knob Handle
43—Handle Casting
44—Handle Screw
45—Wing
46—Frog Set Screw
47—Brass Machine Screw
48—Clog Nut

In Ordering, give Make of Plane, its Number or Kind, Length, and the Number of Part wanted.

PLANE HANDLES



BAILEY

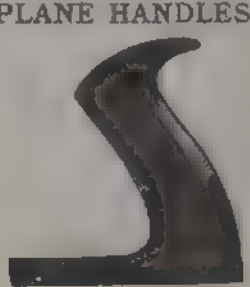
Per Dozen

No. 11—Rosewood, Fits Bailey All Iron Planes from No. 4½ to 8 ..... $2 40

Weight 1½ Lbs. per Dozen

No. 11W—Beechwood, Varnished, Fits Bailey Wood Bottom Planes No. 26 to 34 ..... 1 80

Weight 2 Lbs. per Dozen



JACK

Plain Beechwood

Per Dozen

No. 10—For Wood Jack Planes. Weight 3 Lbs. per Dozen $0 84

One Dozen in a Box

FORE AND JOINTER

Per Dozen

No. 12—For Wood Fore and Jointer Planes $1 50

Weight 4½ Lbs. per Dozen

Above Handles Carried in Stock; Special Ones Shipped Direct from Factory

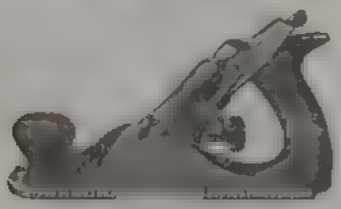
ADJUSTABLE IRON PLANES

STANLEY RULE AND LEVEL CO.

The Plane Iron is made from the Best Quality English Cast Steel of equal thickness throughout, Tempered and Ground ready for use; the Plane Iron Cap is also made of Steel; the Body is made of Cast Iron Japanned, Mahogany Handle and Knob, Brass Adjusting Screw; all Parts are Interchangeable.

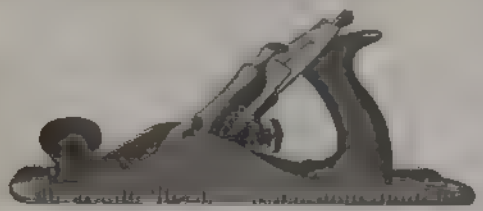
The Corrugated Bottom creates very little Friction and makes an easier running plane than the Smooth Bottom.

BAILEY, SMOOTH BOTTOM



SMOOTH

		Each
No. 1	7½ in. Long, 1¾ in. Cut, Weight 1¼ Lbs.	$1 [illegible]
No. 2	7 in. Long, [illegible] Cut, Weight 2¾ Lbs.	[illegible]
No. 3	8 in. Long, 1¾ in. Cut, Weight [illegible]	[illegible]
No. 4	9 in. Long, 2 in. Cut, Weight [illegible]	2 [illegible]
No. 4½—10	in. Long, 2⅜ in. Cut, Weight 4¼ Lbs.	2 75



JACK

		Each
No. 5	—14 in. Long, 2 in. Cut, Weight 4⅝ Lbs.	$2 75
No. 5½—	15 in. Long, 2¼ in. Cut, Weight 6 Lbs.	3 15

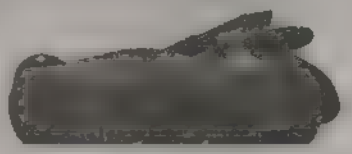
FORE

No. 6	—18 in. Long, 2⅜ in. Cut; Weight 7¼ Lbs.	3.50

JOINTER

No. 7	—22 in. Long, 2¾ in. Cut, Weight 7¼ Lbs.	4 00
No. 8	—24 in. Long, 2⅝ in. Cut, Weight 9 Lbs.	4 80

BAILEY, CORRUGATED BOTTOM



SMOOTH

		Each
No. 2C	7 in. Long, 1¾ in. Cut, Weight 2¼ Lbs.	$ [illegible]
No. [illegible]C	[illegible] in. Long, 1¾ in. Cut, Weight [illegible] Lbs.	[illegible]
No. 4C	[illegible] in. Long, 2 in. Cut, Weight 3½ Lbs.	[illegible]
No. 4½C—10	in. Long, 2⅜ in. Cut, Weight 4⅜ Lbs.	[illegible]

JACK

		Each
No. 5C	—14 in. Long, 2 in. Cut, Weight 4⅝ Lbs.	$2 [illegible]
No. 5½C	—15 in. Long, 2¼ in. Cut, Weight [illegible] Lbs.	[illegible]

FORE

No. 6C	—18 in. Long, 2⅜ in. Cut; Weight 7¼ Lbs.	3 50

JOINTER

No. 7C	—22 in. Long, 2¾ in. Cut, Weight [illegible] Lbs.	[illegible]
No. 8C	—24 in. Long, 2⅝ in. Cut, Weight 9 Lbs.	4 80

BED ROCK, SMOOTH BOTTOM

Stanley Bed Rock Planes are the Acme of Solid, Rigid Construction and Wide Range of Adjustment, a Simple Turn of a Screw Adapts it for Hard or Soft Wood; the entire bottom surface of the Frog is in contact with the Plane Bed, the Heel of the Plane Iron rests on the Frog, preventing Plane from springing up and down, shifting or wabbling.

SMOOTH

		Each
No. 602	— 7 in. Long, 1⅝ in. Cut; Weight 2½ Lbs.	$3 [illegible]
No. 603	— 8 in. Long; 1⅝ in. Cut; Weight 3 Lbs.	2 55
No. 604	— 9 in. Long; 2 in. Cut; Weight 3½ Lbs.	2 [illegible]
No. 604½	—10 in. Long, 2⅜ in. Cut, Weight 4½ Lbs.	3 20

JACK

		Each
No. 605	—14 in. Long, 2 in. Cut; Weight 4½ Lbs.	$ [illegible]
No. 605½	—15 in. Long, 2¼ in. Cut, Weight 6 Lbs.	3 [illegible]

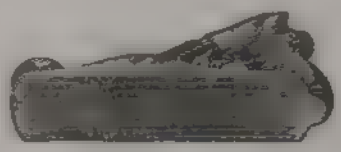
FORE

No. 606	—18 in. Long; 2⅜ in. Cut; Weight 7¼ Lbs.	4 85

JOINTER

No. 607	—22 in. Long; 2¾ in. Cut; Weight 7¾ Lbs.	4 60
No. 608	—24 in. Long; 2⅝ in. Cut, Weight 9 Lbs.	[illegible]

BED ROCK, CORRUGATED BOTTOM



SMOOTH

		Each
No. 602C	— 7 in. Long, 1⅝ in. Cut; Weight 2¼ Lbs.	$3 [illegible]
No. 603C	— 8 in. Long, 1⅝ in. Cut; Weight 3 Lbs.	2 55
No. 604C	— 9 in. Long, 2 in. Cut; Weight 3½ Lbs.	2 [illegible]
No. 604½C	—10 in. Long, 2⅜ in. Cut, Weight 4½ Lbs.	3 20

JACK

		Each
No. 605C	—14 in. Long; 2 in. Cut; Weight 4½ Lbs.	$4 20
No. 605½C	—15 in. Long, 2¼ in. Cut; Weight 6 Lbs.	5 60

FORE

No. 606C	—18 in. Long; 2⅜ in. Cut; Weight 7¼ Lbs.	3 85

JOINTER

No. 607C	—22 in. Long; 2¾ in. Cut; Weight 7¾ Lbs.	4 60
No. 608C	—24 in. Long; 2⅝ in. Cut, Weight 9 Lbs.	5 50

All Above Planes, One in a Box

WHY ZENITH HATCHETS ARE BEST

No. 1 No. 2 No. 3 No. 4 No. 5 No. 6 Zenith

Nos. 1, 2 and 3 are made by three well known Manufacturers

These six illustrations are of Hatchets which have been cross sectioned, to show construction of Tool and quality of Steel

The first four are welded together from different kinds of Steel; the last two are of one solid piece of Steel. It is the general misunderstanding of the trade that some Hatchets stand at the top as to quality, because they are by far the highest priced. Ask these manufacturers why their Hatchets are made with a weld and the answer is that the experience of many, many years has taught them that the best Hatchet is made by the same method as was used by their grandfathers.

The reasons for their manufacturing welded Hatchets are as follows: When they started manufacturing of Hatchets, over half a century ago, their equipment was probably not much better than that now found in any good Blacksmith shop. At that time, the Steel industry was in a very crude state and Puddled Iron was the commercial product. No Bessemer or Open-hearth Steel processes existed. There was a small amount of Crucible Steel made, but this was very expensive and was made almost exclusively in England.

Puddled Iron is an exceedingly soft and ductile material having an irregular composition, containing variable amounts of foreign impurities called slag or cinder. This Iron is not freed from its slag by melting, as is metal remolten in the Crucible or in the Open-hearth Furnace. Such Puddled Iron, of course, could not be used for the edges of Tools, and consequently the practice was to weld a strip of Crucible Steel on the Blade of Puddled Iron to form the Edge and another piece on the Head as seen in Nos. 1 and 2.

In the further development of the Steel industry, Puddled Iron was replaced by Bessemer and Open-hearth Steel. By these processes, Steels of definite chemical composition in large quantities (many thousand pounds) can be made according to the desired purpose, either low in carbon and consequently ductile and weldable as Puddled Iron, or high in carbon and therefore tough and hard and equal in many respects to Steel cast in a crucible

It required much skill and caused much resulting loss in defectives to make a perfect weld between Crucible Steel of high carbon and Puddled Iron. But it is still more difficult to produce such a weld between high carbon Tool Steel and low carbon Open-hearth or Bessemer Steel. The welds frequently break or split open and render the Hatchets useless, or the high carbon Crucible Steel edge is often spoiled by heating it too highly in the welding process, thus rendering it brittle

One concern has not even progressed to the point of putting in a press to punch out the eye, but still makes it by folding the flat Steel over an eye mold and welding together, the ends, as is seen in No. 1 where a weld is visible starting at the beveled edge and going over to the corner of the eye. This folded weld does not injure the Hatchet in the slightest if it has been made a perfect weld by great skill and care, but it certainly does increase the cost, without bettering the Hatchet.

From our experience in the past years with "returned" Hatchets having a welded edge, we have noted that about 75% of the defects were caused by imperfect welds at the beveled edge, and for this reason, later manufacturers use a weld similar to that in sample No. 3.

This particular sample has a low grade of Steel in the body of the Tool, indicated by the dark streaks which run through the metal The Tool Steel edge which is welded on by overlapping contains 25% less carbon than the Edge Steel in either No. 1 or No. 2.

This No. 3 construction is an improvement as far as breaking of the edge weld is concerned, but even here we will have the same trouble if the Hatchet is ground far down.

As with No. 1 and No. 2 there is also the difficulty of getting a perfect weld without injuring the quality and temper of the edge Steel.

In consequence with the development of the Steel Industry, an All-Steel Hatchet appeared at first in the cheaper grades and was found to give [illegible] satisfaction in cases where good Steel was used and the proper temper given. The most progressive and modern factories then began making one-piece hatchets with First Quality Tool Steel of High Carbon.

We are satisfied that a one piece Hatchet manufactured from high Grade Steel (of uniform chemical composition, free from streaks and lamination, slag or other impurities) and correctly tempered, is the best Hatchet that can be made (and have adopted it) for our Zenith Brand, No 6.

There may be a wide difference in one piece, Steel Hatchets. You will note in No. 5 a low grade of Steel is used. The photo shows dark parallel streaks, which are the result of a variation in composition and lamination of the Steel, which is apt to be brittle. The tempering is not done uniformly and judiciously.

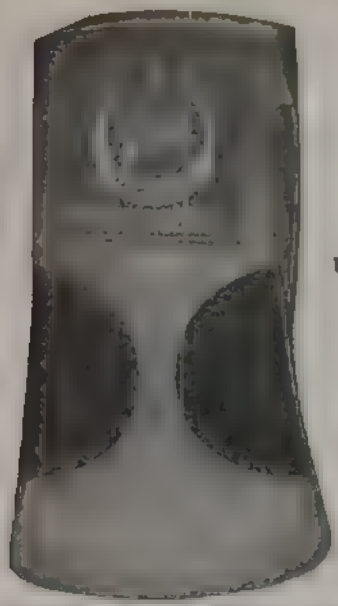
Sample No. 6 is our present Zenith and you will note that the Steel is absolutely uniform and flawless. We know that this brand cannot vary in quality; that every lot of Steel is thoroughly tested before going into the forge and that the facilities in the hardening room are such as to control and maintain a uniform heat treatment in the tempering process. We are certain that these Hatchets are the best that can be made and fewer failures will be found among them than in any others

Besides the quality of the Steel and Temper, the shape of the Zenith Tool will appeal to the user. It is more slimly built and requires less effort in cutting and splitting wood than a thicker Hatchet blade. It requires less work to regrind the edge properly, since the grinding bevel is much thinner.

The Hatchet is tempered very hard, as far as the light discoloration seen on the print. If the Hatchet is desired to be used still further, it can be rehardened and tempered —another feature of advantage over the old style Hatchets.

Lastly, the Zenith Wedge is the best "Handle Fastening" yet evolved.

SINGLE BITTED AXES



UNCONDITIONALLY GUARANTEED

NEW ZENITH; HIGHEST QUALITY

This Axe is beautifully finished, highly polished and etched. It is perfectly Shaped, expressly for the use of the Expert Chopper and Woodsman; The Blade is thin and full bevel ground to the number, the Phantom or Hollow Bevel prevents the Axe from binding in the wood, the Axe is evenly balanced; the Eye is perfect so that the Axe will hang right.

The Edge is made of the Highest Grade of Crucible Steel properly hardened, tempered, ground and honed

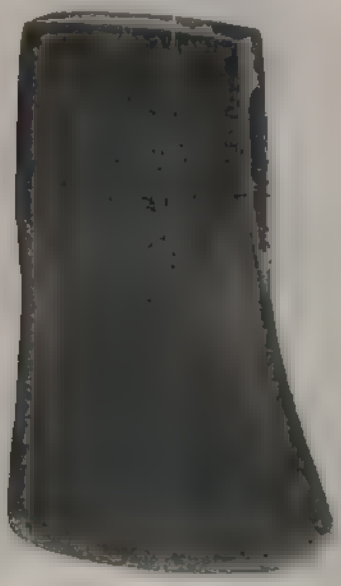
No. 10—WISCONSIN PATTERN
Narrow Bit

Weights	3¼ to 3¾	3½ to 4	3½ to 4½	4 to 5
Per Dozen	$18 00	18 50	18 50	18.75

No. 15—MICHIGAN PATTERN
Wide Bit

Weights	3¼ to 3¾	3½ to 4	3½ to 4½	4 to 5
Per Dozen	$18.00	18 50	18 50	18.75

One in a Wood Box, with a Fine Axe Stone
One Dozen in a Case; Shipping Weight 50 Lbs. per Dozen



OUR HAND MADE, HIGH QUALITY
Improved Pattern, Thin Blade, Large Eye

This Axe [illegible] Natural Finish receives its forging, hardening and tempering, the name is stamped in
The Axe is [illegible] to stand the hardest usage, the Blade is ground thin, the Axe is properly balanced, the eye is perfect so that the Axe will hang right.

The Edge is made of Highest Grade of Crucible Steel properly hardened, tempered, ground and sharpened

No. 20—WISCONSIN PATTERN
Narrow Bit

Weights	3¼ to 3¾	3½ to 4	3½ to 4½	4 to 5
Per Dozen	$15 00	15 50	15 50	16 00

No. 25—MICHIGAN PATTERN
Wide Bit

Weights	3¼ to 3¾	3½ to 4	3½ to 4½	4 to 5
Per Dozen	$15 00	15 50	15.50	16 00

One Dozen Assorted Weights in a Box; Shipping Weight 50 Lbs. per Dozen

SINGLE BITTED AXES

MESABA
Gold Bronzed

Special Refined Cast Steel, Gold Bronzed Blue and Gilt Embossed Label, Polished Bit and Head, Perfectly Tempered, Ground and Sharpened

No. 30—WISCONSIN PATTERN
Narrow Bit

Weights	3¼ to 3¾	3½ to 4	3½ to 4½	4 to 5
Per Dozen	[illegible]	13 50	14 50	15 00

No. 35—MICHIGAN PATTERN
Wide Bit

Weights	3¼ to 3¾	3½ to 4	3½ to 4½	4 to 5
Per Dozen	[illegible]	13 50	14 50	15 00

One Dozen Assorted Weights in a Box; Shipping Weight 50 Lbs. per Dozen
Weight of Each Axe is Stamped on the Poll

NORTHERN KING

Extra Quality Cast Steel, Black Finish, Green, Black and Gilt Label, Polished Bit and Head, Tempered, Ground and Sharpened

No. 40—WISCONSIN PATTERN
Narrow Bit

Weights	3¼ to 3¾	3½ to 4	3½ to 4½	4 to 5
Per Dozen	$13 00	13 50	13 50	14 00

No. 45—MICHIGAN PATTERN
Wide Bit

Weights	3¼ to 3¾	3½ to 4	3½ to 4½	4 to 5
Per Dozen	$13 00	13 50	13 50	14 00

One Dozen Assorted Weights in a Box; Shipping Weight 50 Lbs. per Dozen

DOUBLE BITTED AXES

UNCONDITIONALLY GUARANTEED

NEW ZENITH; HIGHEST QUALITY

This Ax[illegible] Phantom or Hollow Bevel [illegible] the Axe is evenly [illegible]ed, the E[illegible] perfect so that the axe will hang right.

The Edge is made of Highest Grade of Crucible Steel, properly hardened, tempered, ground and honed

No. 50—WISCONSIN PATTERN
Narrow Bits

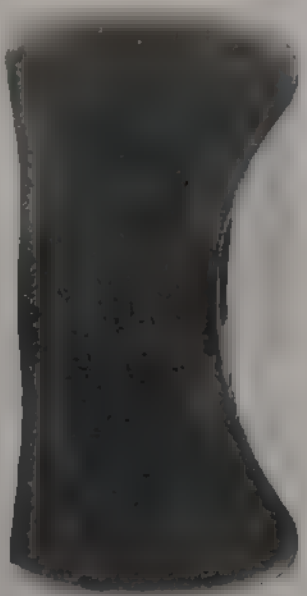
Weights	3¼ to 3¾	3½ to 4	3½ to 4½	4 to 5
Per Dozen	$23 00	24 00	[illegible]	26 00

No. 55—MICHIGAN PATTERN
Wide Bits

Weights	3¼ to 3¾	3½ to 4	3½ to 4½	4 to 5
Per Dozen	$23 00	24 00	[illegible]	26 00

[illegible] Axe Box, [illegible] Fine Axe Stone

One [illegible] ing Weight 50 Lbs. per Dozen



OUR HAND MADE; HIGH QUALITY

Improved Pattern; Thin Blade, Large Eye

[illegible] Natural Finish [illegible] forging, hardening and tempering [illegible] Axe [illegible] the hardest usage, [illegible] Blade [illegible] Edge [illegible] that the Axe will hang right.

The Edge is made of Highest Grade of Crucible Steel properly hardened, tempered, ground and sharpened.

No. 60—WISCONSIN PATTERN
Narrow Bits

A great favorite among the Minnesota, Wisconsin and Michigan Loggers and Woodchoppers

Weights	3¼ to 3¾	3½ to 4	3½ to 4½	4 to 5
Per Dozen	$20 00	20 00	20 50	21 00

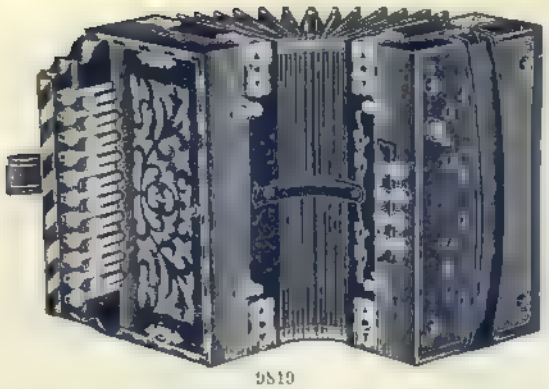
No. 65—MICHIGAN PATTERN
Wide Bits

Used both for Chopping and Peeling the bark from large timber a favorite in the Northwest and on the Pacific Coast

Weights	3¼ to 3¾	3½ to 4	3½ to 4½	4 to 5
Per Dozen	[illegible]	20 50	20 50	21 00

One Dozen Assorted Weights in a Box; Shipping Weight 50 Lbs. per Dozen

VIENNA ACCORDEONS



9819

Size 5½x9¾. Rosewood Finish Case, scroll top, 11 substantial bellows-folds, "ACME ADJUSTABLE CASE AND BELLOWS-FRAME TIGHTENERS," leather clasps, 10 long keys, pearl buttons, 2 sets of reeds, 4 basses.

No. 9824 ..... Each $10.25

Same as above, but with black frame and bellows, and genuine steel reeds

No. 9825 ..... Each $12.25

Size 5½x9¾. Case Mahogany Finish, both top and bottom brass edges, fretwork panels, 13 bellows folds, corner protectors and leather clasps, 10 long white keys with pearl buttons, 2 sets of Wiener reeds, 4 basses, and equipped with "ACME ADJUSTABLE CASE AND BELLOWS-FRAME TIGHTENERS."

No. 9819 ..... Each $12.25

Size 5½x10¼. Rosewood Finish Case, white panels, fancy fretwork top, 15 bellows-folds with corner protectors and leather clasps, 10 long keys with white pearl finger-buttons, "ACME PATENT ADJUSTABLE CASE AND BELLOWS-FRAME TIGHTENERS," 2 sets of hand-made steel bronze reeds, 4 basses.

No. 9820 ..... Each $13.50

Same as No. 9820, but has ebonized case, white panels, and genuine steel reeds.

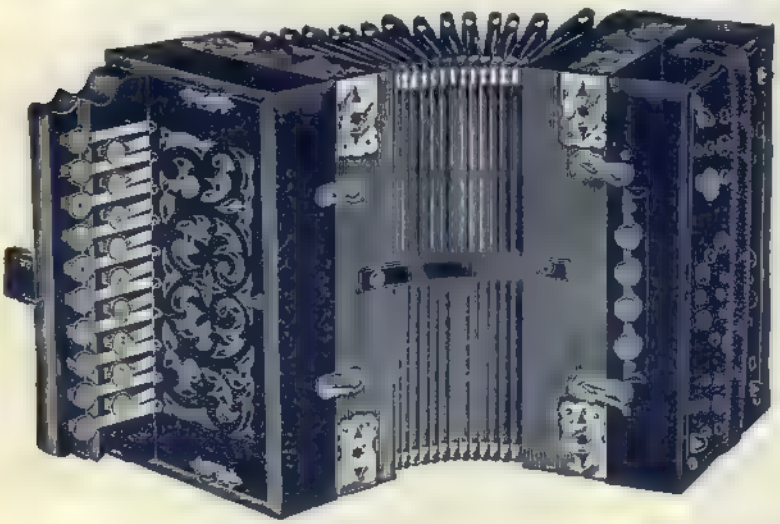
No. 9821 ..... Each $15.25

Size 5½x9¾. Ebonized Case, gilt ornamentation, fretwork panel, 13 bellows-folds with corner-protectors and clasps, 10 long black and gilt keys with white pearl finger buttons, "ACME PATENT ADJUSTABLE CASE AND BELLOWS-FRAME TIGHTENERS," 2 sets of Vienna reeds, 4 basses.

No. 9827 ..... Each $12.25

Size 5½x9¾. Rosewood Finish Case, sunken panel top, nickel moulding about inner edges of frame, extra quality hand-made Keratol-covered bellows, metal bellows-protectors and leather clasps, 10 white round keys, 2 basses, 2 sets of reeds.

No. 9828 ..... Each $16.50



No. 9836½.

Size 6x10¾ inches.

Ebonized Case and Mouldings, "ACME PATENT ADJUSTABLE CASE AND BELLOWS FRAME TIGHTENERS," leatherette covered bellows-frame, 12 folds, metal corner protectors and clasps, 19 long pearl-tipped keys, 4 sets of reeds, 4 basses.

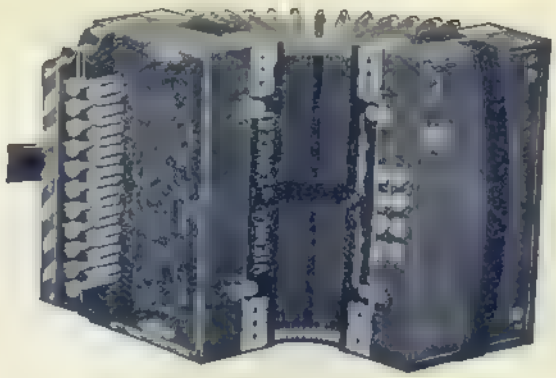
No. 9836½ ..... Each $14.75

19 long pearl-tipped keys, 4 sets of reeds, 8 basses.

No. 9836¾ ..... Each $17.75

21 long pearl-tipped keys, 4 sets of genuine steel reeds, 15 folds, 8 basses.

No. 9836¾ ..... Each $25.75



9837

Size 7x10¾. Rosewood Finish Case with fretwork panels, corded colored wood edges, leatherette covered bellows-frame, 13 folds, metal corner-protectors, leather clasps, 19 long keys, pearl finger-buttons, "ACME PATENT ADJUSTABLE CASE AND BELLOWS-FRAME TIGHTENERS," 8 basses, 4 sets of Bell metal reeds.

No. 9836 ..... Each $20.50

Same as No. 9836 but 21 keys and 14 folds in bellows.

No. 9837 ..... Each $21.50

Same as No. 9837, but plain black case and bellows, 16 folds, 12 basses.

No. 9838 ..... Each $24.75

No. 9855

Size 7x12 inches.

Vienna Model, ebonized case and fretwork panels, "ACME PATENT ADJUSTABLE CASE AND BELLOWS FRAME TIGHTENERS," metal corner-protectors, leather clasps, and 16 heavy Keratol bellows-folds, 31 long keys with pearl finger-buttons, 6 sets of genuine steel reeds, 16 basses.

No. 9855 ..... Each $54.00

Our musical pages have been compiled with best of attention and goods illustrated and quoted therein are the very best sellers in these respective articles; therefore, in view of our careful consideration and rock-bottom prices, we most urgently request that you eagerly solicit orders for same

All orders filled same day received. No delay whatsoever.

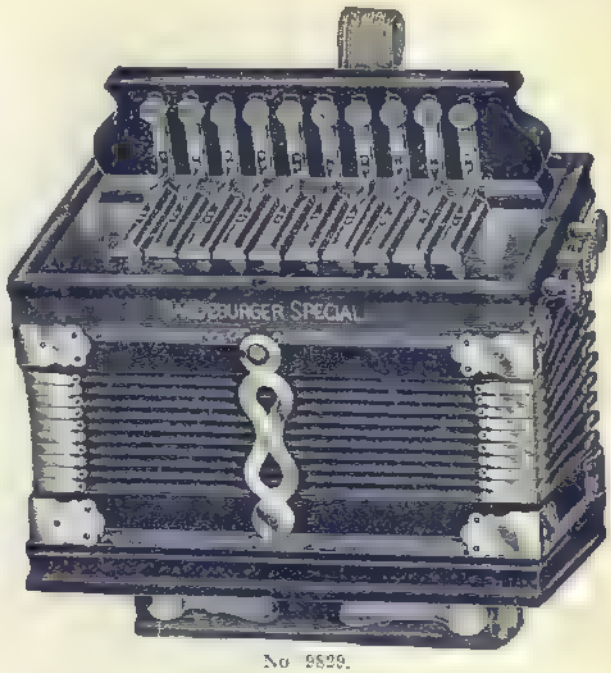
ACCORDEONS

Nos. 91119-91121.

Size 12x7 Inches.

Ebonized Mouldings and Panels, Open Action Keyboard, Ornamented with Gilt Designs, Nickel Button Keys, Bellows Protectors, Corners and Clasps, Triple Bellows with Nickel Corner Protectors.

No. 91119 19 Keys, 4 Sets of Reeds, Each .. $12.25
No. 91121 21 Keys, 2 Stops, 4 Sets of Reeds, Each .. 12.75

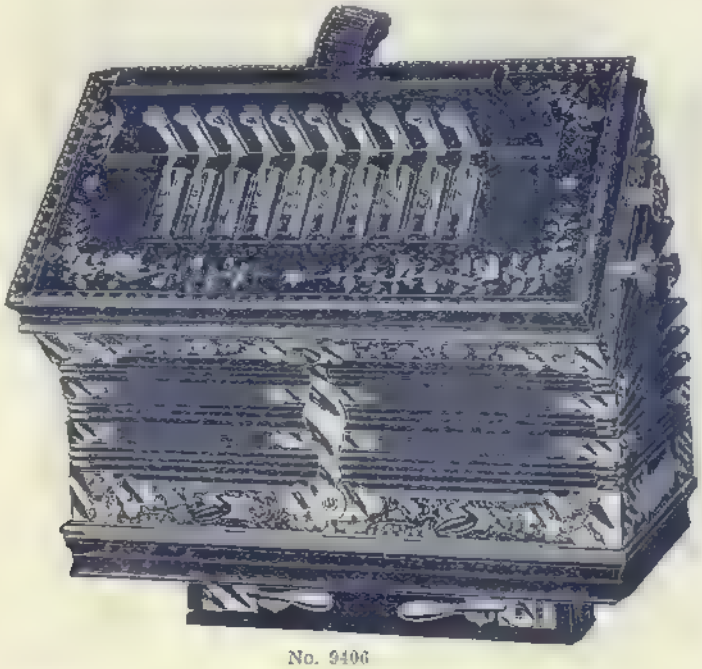


No. 9829.

Size 7x11¾ Inches.

Ebonized Case and Panels, Open Keyboard, 10 Broad Bellows-folds with Corner Protectors, Cloth Covered Bellows. TUNED IN OCTAVES, producing a quality and volume of tone not found in Popular accordeons.

No. 9829 10 Long Pattern Keys with Pearl Fingerboards, 2 Long Bass Keys, 2 Sets of Extra Brass Reeds, Each $24.00

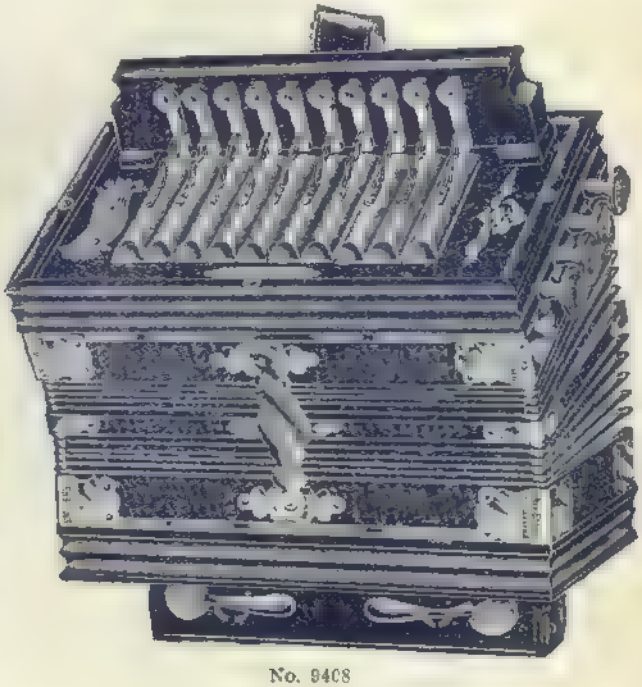


No. 9406

Size 14x7 Inches.

Ebonized Mouldings with Nickel Cornice, Highly Polished Panel, Inlaid with Pearl and German Silver, Pearl Button Keys, Open Action Keyboard so arranged that springs may be replaced without taking the instrument apart, Nickel Corners and Clasps, Triple Bellows with Bellows Protectors.

No. 9406 10 Keys, 2 Stops, 2 Sets of Reeds, Each.....$15.75



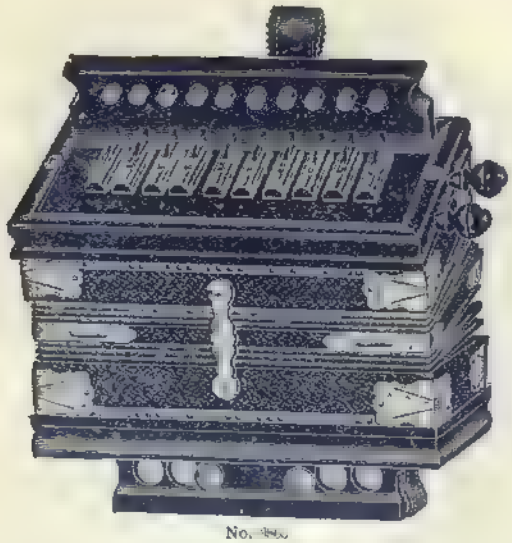
No. 9408

Size 12x6¾ Inches.

Ebonized Mouldings, Keyboard and Panels, Panels Decorated with Silver Ornaments, "Quick Repair" Open Keyboard, which facilitates replacing springs without taking the instrument apart, Nickel Bellows Protectors, Corners and Clasps.

No. 9408 10 Keys, 4 Stops, 4 Sets of Reeds, Each.....$15.75

ACCORDEONS

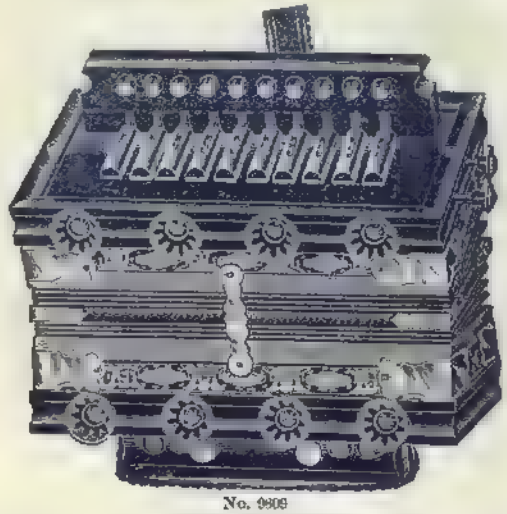


No. 9801
Size 4 4x9¼ inches.

No. 9801 Ebonized case and mouldings, double bellows, corners and clasps. 10 keys, 2 stops, 1 set of reeds .. .. each, $3 50

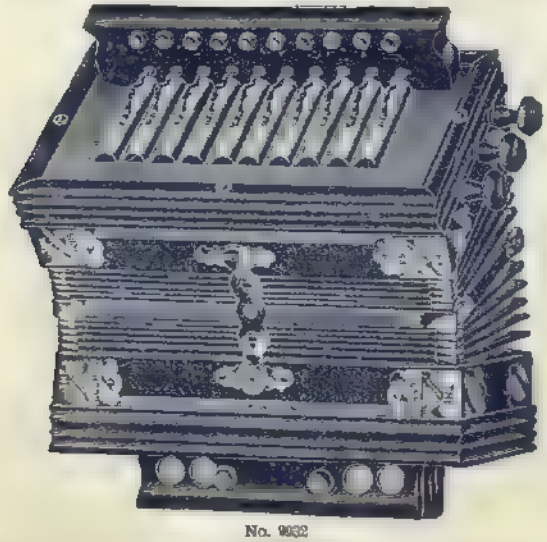
Size 4⅜x9¾ inches.

No. 9803 Ebonized case and mouldings, open action, double bellows, corners and clasps. 10 keys, 2 stops, 1 set of reeds . .. .each, $4.00



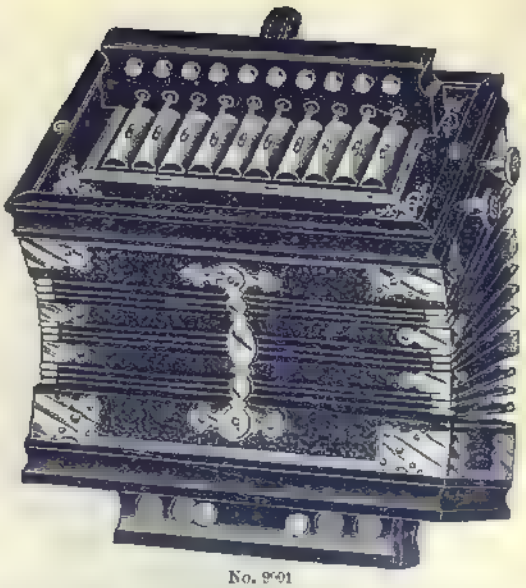
No. 9809
Size 5¼x10¼ inches.

No. 9809 Ebonized case and mouldings, open keyboard, double bellows, nickel corners and clasps, eight green and gilt bugles. 10 keys, 2 stops, 1 set of reeds .. ..each, $5.25



No. 9832
Size 10x5-¼ inches.

No. 9832 Ebonized mouldings and key board, attractively finished, blue panels with gilt ornamentation, nickel bellows protectors, nickel corners and clasps, double bellows. 10 keys, 3 stops, 3 sets of reeds..... each, $7 25

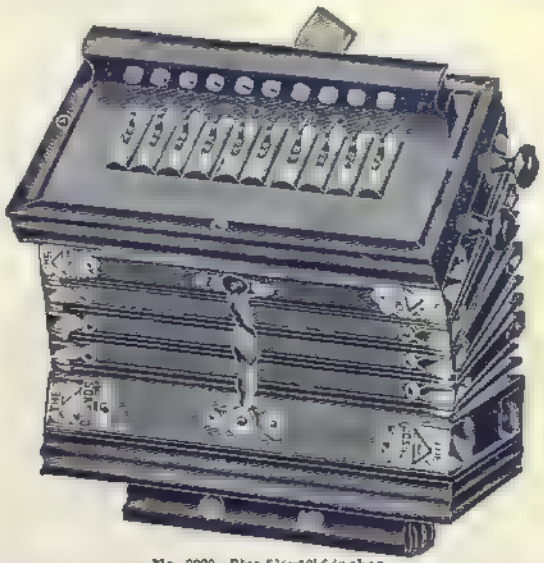


No. 9901
Size 4⅜x9¾ inches.

No. 9900 Ebonized panels and mouldings, open keyboard, nickel keys, corners and clasps, double bellows. 10 keys, 2 stops, 1 set of reeds. . . . each, $4 50

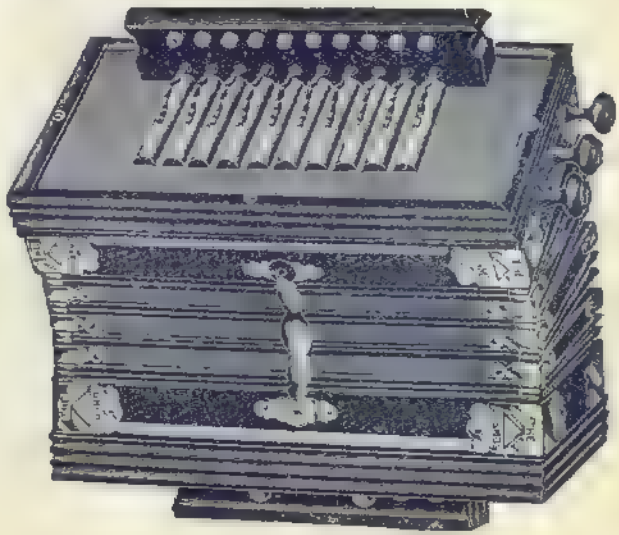
Size 5½x9¾ inches.

No. 9901 Ebonized case and panels, open keyboard with nickel moulding, double bellows, dovetailed corners, clasps and bellows protection 10 keys, 2 stops, 2 sets of reeds . .. .each, $5.25



No. 9930—Size 5½x10¼ inches.

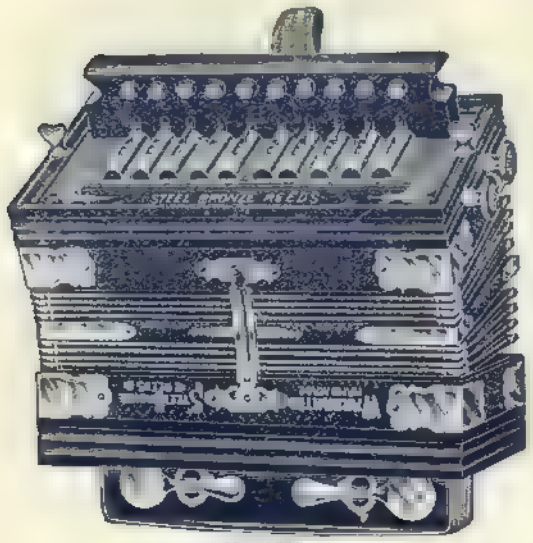
No. 9930 Mouldings, panels, bellows and frames handsomely colored and attractively brushed in solid colors—red, blue and green, nickel corners and clasps, nickel bellows protectors, bone button keys, quadruple bellows. 10 keys, 2 stops, 2 sets of reeds . . . .each, $6 50



No. 9936—Size 12x8 inches.

No. 9936 Ebonized mouldings and keyboard, attractively finished, blue panels, bone button nickel keys, nickel bellows, protectors, corners and clasps, quadruple bellows. 10 keys, 3 stops, 3 sets of reeds . ... each, $8 25

ACCORDEONS

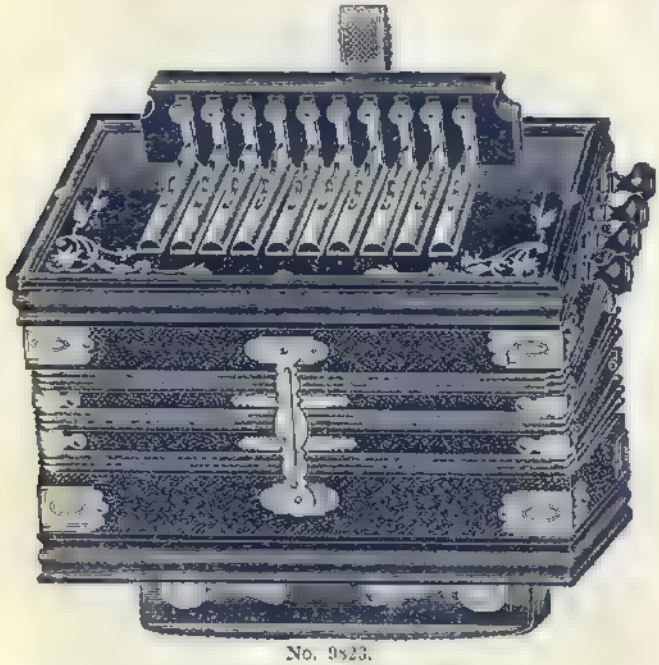


No. 9817.

Size, 6x11¼ Inches.

Ebonized Panels and Mouldings, Triple Bellows, Metal Thumbscrew Top Fasteners and Corner Protectors.

No. 9817 10 Long Pearl Tipped Keys, 3 Sets Hand-made Steel Bronze Reeds, 3 Stops, 2 Long Model Bass Keys....Each $10.50
No. 91817 Same as above, but **Genuine Steel Reeds**.... Each $13.50
No. 9818 Size 6½x11¾. Walnut Finish Panels, Black Mouldings, Thumbscrew Top Fasteners, Triple Bellows, Nickel Corner Protectors and Clasps, 10 Medium Length Keys with Pearl Buttons, 4 Sets of Steel Bronze Reeds, **Octave Tuning**, 4 Wooden Stops, 2 Long Model Bass Keys..Each $12 25
No. 91818 Same as above, but **Genuine Steel Reeds**..Each $16 50



No. 9823.

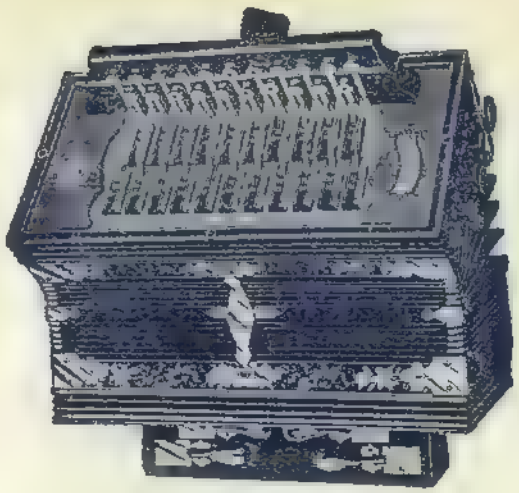
Size, 7⅝x12⅛ Inches.

Ebonized Case, Triple Bellows, with Keratol Covered Frame. Metal Corner Protectors, TUNED IN OCTAVES (One set tuned in thirds).

No. 9823 10 Long Pearl-tipped Keys, 4 Wooden Stops, 4 Sets of Reeds..... Each $13.25

Fluted Mouldings, Imitation Mahogany, Panel Mahogany, Sunken Open Action Keyboard, Pearl Button Keys, Nickel Bellows Protectors, Nickel Corners and Clasps, Double Bellows.

No. 9419 19 Keys, 4 Stops, 4 Sets of Reeds, Size 14½x7 inches .....Each $23 50
No. 9421 Same as No. 9419, with 21 Keys, 4 Sets of Reeds, Size 15x7½.....Each $25 75

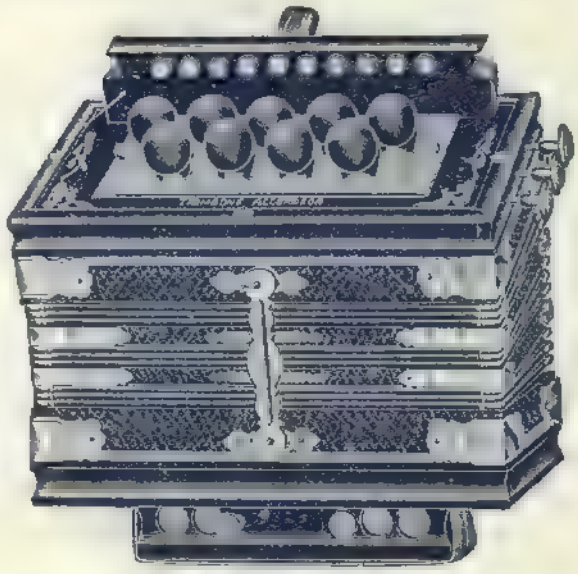


No. 91009

Size 6¼x11¼ Inches.

Oak Finish Panels, Ebonized Mouldings, Open Keyboard, Nickel Keys, Bellows Protectors, Nickel Corners and Clasps, Double Bellows.

No. 91009 10 Keys, 4 Stops, 4 Sets of Extra Broad, Warranted Hand-made, Steel Bronze Reeds.....Each $9.25



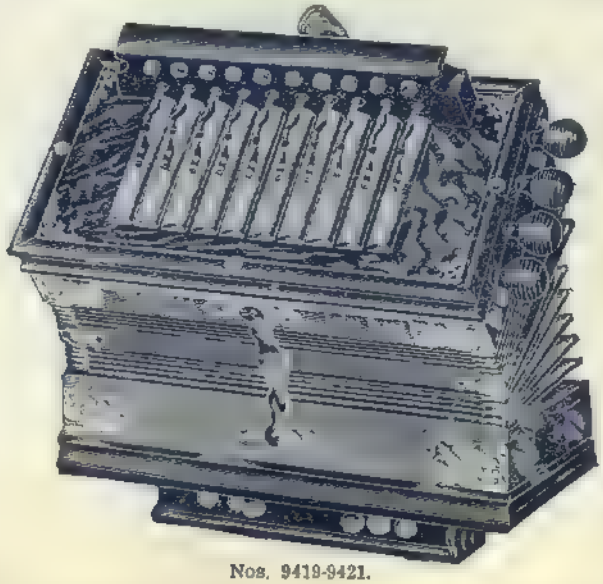
No. 9826.

TROMBONE ACCORDEON.

Size 6½x11 Inches.

Ebonized Panels and Mouldings, Triple Bellows with Nickel Corner Protectors and Clasps. Nine Double Bellows, Nickel Corners and Clasps, 9 Funnel-Shaped Bugles on Top.

No. 9826 10 Round White Keys, 3 Stops, 3 Sets of Wiener Reeds .....Each $11.50



Nos. 9419-9421.

ADJUSTABLE WOOD PLANES

STANLEY RULE AND LEVEL CO.

Best Selected Well Seasoned Beechwood Bodies, Carefully Fitted and Varnished, Cap Iron, Cap Bolt, Quarter Engraved Cap Screw, Patent Lever Cap, Corrugated Bottom, Adjustable Throat, Rosewood Handle and Knob, Brass Adjusting Screw, Nickel Plated Bed, Hardened Steel Cutting Iron, Ground, Whetted and Polished, and the Corrugated Bottom Prevents the Plane Sole From Wearing Hollow. The Cutting Edge can easily be brought into position, exactly square with the Sides of the Plane, by means of the Lateral Adjustment under the Plane Iron. A Revolving Disc on the Lever Prevents all Friction.

Uses of Different Kinds of Planes

A Smooth Plane is used for smoothing off the rough surfaces of the boards
A Jack Plane is used to True up the edges of a board in the rough and prepare it for the Fore or Jointer
A Fore Plane is simply a short Jointer and is used on shorter work
A Jointer [illegible] up the edges of boards so they can be closely fitted or jointed together
A Block Plane is used for shaping and smoothing the ends of boards, moulding, etc.

BAILEY PATENT

SMOOTH WITHOUT HANDLE

	Each
No. 22—8 in. Long, 1¾ in. Cut, Weight 2¼ Lbs.	$1 50
No. 23—9 in. Long, 1¾ in. Cut; Weight 2¾ Lbs.	1 50
No. 24—8 in. Long, 2 in. Cut; Weight 2¾ Lbs.	1 50

BLOCK

No. 25 [illegible] Long, 1¾ in. Cut [illegible]	1 40

HANDLED SMOOTH

	Each
No. 35—9 in. Long, [illegible]	$ 90
No. 36—10 in. Long, [illegible]	2 35

JENNY SMOOTH

No. 37 [illegible]	2 20

JACK

No. 26 [illegible]	$1 [illegible]
No. 27 [illegible]	1 [illegible]
No. 27½ [illegible]	1 [illegible]

FORE

No. 28 [illegible]	[illegible]
No. [illegible] Long, 2⅝ in. Cut; Weight 5¾ Lbs.	2.05

JOINTER

	Each
No. 31 [illegible] Long, 2¾ in. [illegible]	$2 [illegible]
No. [illegible] Long, 2⅝ in. [illegible]	[illegible]
No. 32 [illegible] Long, 2⅝ in. [illegible]	[illegible]
No. 3 [illegible] Long, [illegible]	[illegible]
No. 34—30 in. Long, 2⅝ in. Cut, Weight 8½ Lbs.	[illegible]

STANLEY PATENT

SMOOTH, WITHOUT HANDLE

	Each
No. 122—8 in. Long, 1¾ in. Cut; Weight 2¾ Lbs.	$1 10

HANDLED SMOOTH

No. 135—10 in. Long, 2⅜ in. Cut; Weight 3 Lbs.	$1 [illegible]

WOOD PLANES

JACK

	Each
No. 127 [illegible] Long, 2¾ in. Cut, Weight 6¾ Lbs.	$1 [illegible]

FORE

No. 129—20 in. Long, 2⅜ in. Cut; Weight 5 Lbs.	1 65

JOINTER

No. 132—26 in. Long, 2⅝ in. Cut; Weight 6¼ Lbs.	1.90

STEEL PLANES

SMOOTH AND JACK

Wrought Steel Bottom; Polished; Inside is Japanned; Mahogany Handle and Knob; English Steel Irons, Polished and Tempered; Lever Adjustment, Ground [illegible]

SMOOTH

	Each
No. 104—9 in. Long, 2⅜ in. Cut; Weight 8 Lbs.	$2 03

JACK

No. 105—14 in. Long, 2⅜ in. Cut; Weight 8¾ Lbs.	2 60

All Above Planes, One in a Box

BLOCK PLANES

STANLEY RULE AND LEVEL CO.

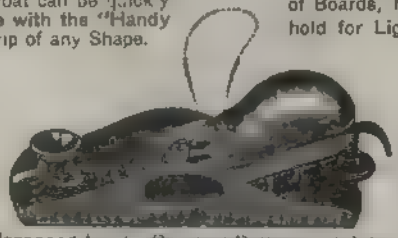
Cast Iron Body, Best Quality English Cast Steel Cutter, Perfectly Tempered and Polished, Ground and Honed, the Throat can be quickly Opened or Closed for Coarse or Fine Work. Made with the "Handy Feature" which gives to the hand the Most Secure Grip of any Shape.

Block Planes are used for Shaping and Smoothing the Ends of Boards, Moulding etc., Handy in Any Office, Store or Household for Light Repairs, etc.

Nickel Plated Cap and Trimmings

	Each
No. 16—6 in. Long, 1¾ in. Cut.	$1 25
No. 17 7 in. Long 1¾ in. Cut	1 35

Average Weight 1½ Lbs. Each



Japanned Inside, Polished Bottom and Sides

Knuckle Joint, Nickel Plated Cap and Trimmings. The Knuckle Joint in the Cap makes it a lever to clamp the Cutter in its Seat.

No. 18 6 in. Long 1¾ in. Cut. Each	$1 30
No. 19 7 in. Long 1¾ in. Cut. Each	1 40

Average Weight 1½ Lbs. Each

Japanned Cap, Brass Adjusting Screw

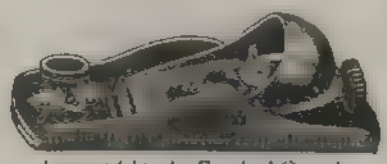
	Each
No. 9½ 6 in. Long, 1¾ in. Cut.	$1 10
No. 15 7 in. Long 1¾ in. Cut.	1 20

Average Weight 1½ Lbs. Each

Each

No. 9¾—6 in. Long, 1⅝ in. Cut; Rosewood Handle, Japanned Cap, Brass Adjusting Screw and Knob $1 80

Weight 1⅝ Lbs. Each



Japanned Inside, Polished Outside

LOW ANGLE

The Cutters being set at a very Low Angle makes it easy to work across the grain.

With Nickel Plated Cap and Trimmings Each

No. 60 6 in. Long, 1½ in. Cut.	$1 25
No. 65—7 in. Long, 1¾ in. Cut.	1.35

With Japanned Cap and Trimmings

No. 60½ 6 in. Long, 1¾ in. Cut	1 10
No. 65½ 7 in. Long, 1¾ in. Cut	1 20

Average Weight 1⅝ Lbs. Each

ADJUSTABLE, DOUBLE END

By Reversing the Cutter Seat and placing the Cap and Cutter in the End Slot, it can be used as a Bull Nose Plane to work into Corners, etc.

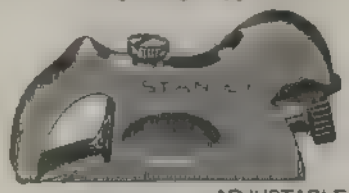
	Each
No. 131 8 in. Long 1¾ in. Cutter, Japanned Cap and Trimmings, Polished Adjusting Wheel, Rosewood Knob	$1 50

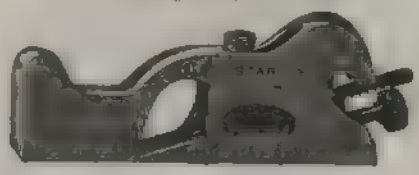
Weight 1⅝ Lbs. Each

DOUBLE END

A Movable Cutter Seat, the Cap and Cutter can be removed and the Seat Reversed and used as a Bull Nose Plane, for Corners, etc.

	Each
No. 130 8 in. Long 1¾ in. Cut; Polished Bottom and Sides, Cap and Inside Japanned, Hardwood Knob Weight 1½ Lbs.	$0 75





ADJUSTABLE CABINET MAKERS' RABBET

Made of Special Quality Iron, Nickel Plated; Cutter has Screw Adjustment

Nos	Each
92—5½ in. Long, ¾ in. Cut; Wt. 1½ Lbs.	$2 20
93 6½ in. Long 1 in. Cut Wt. 1¾ Lbs.	2 60
94 7½ in. Long 1¼ in. Cut Weight 2 Lbs.	3 00

Each

No. 90—4 in. Long, 1 in. Cut; Weight 1 Lb. Each $2 20

ADJUSTABLE

Each

No. 220—7½ in. Long, 1⅝ in. Cut; Polished Bottom and Sides, Japanned Cap and Inside; Rosewood Knob $1 75

Weight 1⅝ Lbs. Each

ADJUSTABLE

Each

No. 203—5½ in. Long, 1¼ in. Cut, Polished Bottom and Sides, Japanned Cap and Inside Rosewood Knob $0.65

Weight 1 Lb. Each

Each

No. 110—7½ in. Long, 1⅝ in. Cut; Polished Bottom and Sides, Cap and Inside Japanned, Hardwood Knob, Weight 1⅝ Lbs. $0.55

These Planes are Small but Well Made and are Used by Toy Dealers, Manufacturers, Boys' Tool Chests, Amateurs, etc. Entire Tool is Japanned

ADJUSTABLE Each

No. 103—5½ in. Long, 1¼ in. Cut $0 55
Weight ¾ Lb. Each

Each

No. 102—5½ in. Long, 1¼ in. Cut. $0 40
Weight ¾ Lb. Each

Each

No. 100—3½ in. Long, 1 in. Cut. $0.25
Weight 1¼ Lb. Each

All Above Planes, One in a Box

STANLEY IRON PLANES

RABBET AND BLOCK

Detachable Side changes Tool from Block to Rabbet and vice versa; Cutter is set obliquely.

Each

No 140—7 in. Long, 1¾ in. Cut; Japanned Inside, Polished Bottom and Sides, Nickel Plated Cap, Polished Steel Adjusting Screw and Lever, Black Walnut Knob $1 10

Weight 1¾ Lbs. Each

FURRING

For removing grit and fur from lumber as it comes roughly sawed from the mill. Bottom rests on the bearing at the Cutter and at the Heel, reducing friction to a minimum; saves the wear on finer tools; Japanned Finish; Plain Beech Handle.

Each

No. 340—10 in. Long, 2 in. Cut..... $1 85

Weight 2⅝ Lbs. Each

SIDE RABBET

A convenient tool for side-rabbeting and trimming dados, mouldings and grooves of all sorts. A reversible nose-piece will give the tool a form by which it will work close up into corners when required.

Nickel Plated; Rosewood Knob

Each

No. 98—4 in. Long, Right Hand..... $1 00

No. 99—4 in. Long, Left Hand..... 1.00

Weight ½ Lb. Each

ADJUSTABLE SCRAPERS

For scraping and finishing mouldings or cabinet work, removing old paint or glue, etc. By adding an extra Toothing Cutter it can be used as a Tooth Plane.

Each

No. 112—9 in. Long, 3 in. Cut; Japanned Inside; Polished Bottom and Sides, Brass Adjusting Screw, Mahogany Handle and Knob; 4 Lbs. $2 20

EXTRA CUTTERS Each

For Veneering $0.20

For Toothing with 22, 28 or 30 Teeth per In. ..... .30

BULL NOSE RABBET

For general rabbeting and working close into a corner.

Each

No. 78—4 in. Long, 1 in. Cut; Top is Japanned, Bottom is Polished, Set Screw Adjustment $0 40

Weight ⅝ Lb. Each

IMPROVED SCRUB PLANES

This Tool has a single Iron, with the cutting edge rounded; and is particularly adapted for roughing down work before using a Jack or other Plane; Japanned Iron Sides.

Each

No. 40— 9¾ in. Long, 1⅛ in. Cut..... $1 10

No. 40½—10½ in. Long, 1½ in. Cut..... 1 50

Average Weight 2¼ Lbs. Each

CARRIAGE MAKERS' RABBET

For Fine Work; used by experts where absolute accuracy is required; Top is Japanned; Balance of Tool is Polished; Mahogany Handle and Knob.

Each

No. 10 —13 in. Long, 2⅜ in. Cut..... $3.30

No. 10½ — 9 in. Long, 2⅛ in. Cut..... 2.75

Average Weight 4 Lbs. Each

VENEER SCRAPERS

For many kinds of work this particular shape has greatest advantage; Takes the same cutters as No. 112 preceding this.

Each

No. 12—6¼ in. Long, 3 in. Cut; Japanned Inside; Polished Wood Bottom and Sides, Brass Adjusting Screws, 11 in. Mahogany Handle $2 50

Weight 3½ Lbs. Each

Extra Cutters same as for No. 112

All Above, One in a Box

PIANO MAKERS' EDGE PLANES

A useful tool for Piano Makers and all Cabinet Workers for trimming inside work, where space prevents the use of any other style plane.

Each

No. 97—9¾ in. Long, 2¼ in. Cut..... $2.20

Weight 2¼ Lbs. Each

LOW ANGLE

Especially adapted for use in cutting across the grain on heavy work, where more power is required than can be obtained by the use of the ordinary Block Plane. This Plane is fitted with patent adjustable throat, which enables the user to work equally well on hard or soft woods.

Each

No 62—14 in. Long, 2 in. Cut..... $2 85

Weight 6⅞ Lbs. Each

RABBET CABINET SCRAPERS

The cutter rests against the front edge of mouth under a slight pressure; when working, cutter springs backward, opening the mouth for shaving to pass through; when pressure is released, cutter springs back to normal position, closing the mouth and preventing dust or shavings falling on finished work. Made with Rosewood Handle and Knob, pivoted to allow tilting, for convenience in working in corners.

Each

No. 85—8 in. Long, 2 in. Cut..... $3.00

Weight 2½ Lbs. Each

BELT MAKERS'

For Paring, Scarfing or Chamfering the laps of a Belt, before Splicing them together.

Each

No. 11—Cast Steel, Japanned; Polished Tempered Bit; 2⅜ in. Cut; Brass Adjusting Screw; 11 in. Maple Handle; Length Over-all 9½ in.; Weight 3½ Lbs. Each..... $2.20

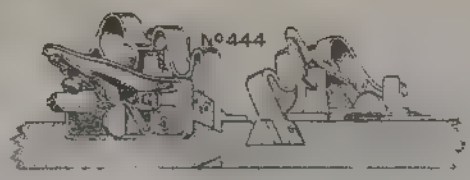
STANLEY IRON PLANES

STANLEY TONGUING AND GROOVING

Nickel Plated Stock and Fence, including Tonguing and Grooving Tools

The Plane has two separate Cutters, a suitable distance apart; when the Guide or Fence is set, as shown above, both Cutters work and a Tongue is made; the Fence is hung on a pivot and can be swung around, end for end; this movement covers one of the Cutters and also furnishes a Guide for grooving an exact Match for the Tongue.

	Each
No. 48—8¾ in., for ¾ to 1¼ in. Boards; Weight 2⅛ Lbs. Each	$2 75
No. 49—8 in., for ⅜ to ¾ in. Boards; Weight 2⅝ Lbs. Each	2 75

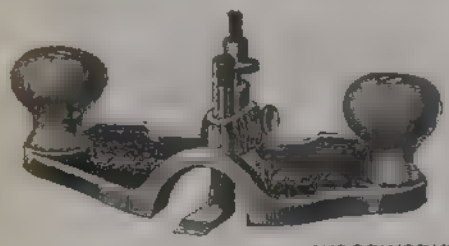


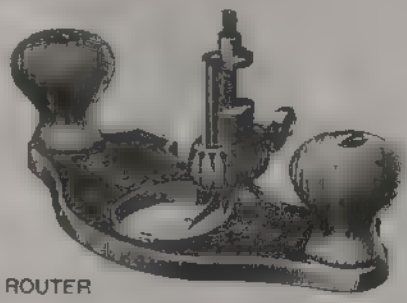
STANLEY COMBINATION DOVETAIL, TONGUE AND GROOVE PLANES

Cuts a Dovetail Tongue and Groove at one setting; it cuts a groove with a Cutter having a horizontal edge guarded by an oblique fence; by resetting will cut a tongue with a cutter having an oblique edge of the same angle; three sizes of Cutters are furnished for boards from ⅛ to 2 inches. Only one size Cutter is required for cutting all sizes of tongues; complete instructions are furnished with each Plane.

	Each
No. 444—Nickel Plated, Weight 6 Lbs.	$6 00

Packed in a Wooden Box





WOODWORKERS' ROUTER

Nickel Plated Steel Stocks; Two Bits, Sizes ¼ and ½ in.; Plain Beech Handle; Length 7¾ in.

OPEN THROAT	Each
No. 71—Allows Shaving to Clear Readily. 1¾ in. Opening; ¼ in. Bit Shank. Weight 2½ Lbs.	$2 05

CLOSED THROAT	Each
No. 71½—Size of Opening 2x1⅝ in.; Weight 2 Lbs.	$1 65

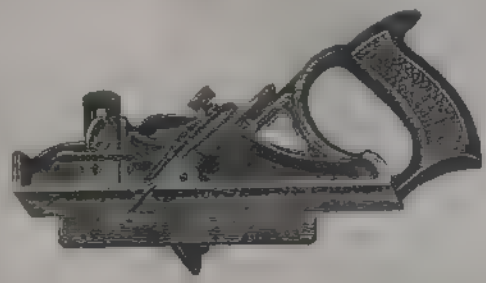
CORE BOX

	Each
No. 57—For Working Semi-Circles, up to 5 in. Diam.; Length 10¾ in., Nickel Plated; Angle 90 Degrees; Weight 5¾ Lbs.	$4 40

COMBINED MATCHING AND GROOVING

This tool is provided with both Tongue and Groove Irons. With one side, a Tongue can be cut; and by reversing ends, the Plane will cut a Groove to fit. The Tonguing Tools are made wider on one side, for use in thicker stuff than the Plane will Tongue and Groove in the center. Full Nickel Plated.

	Each
No. 146—Matches ⅜ in. Boards; Cuts Groove ⅛ in. Wide; Weight 1¾ Lbs. Each	$2.20
No. 147—Matches ½ in. Boards; Cuts Groove ¼ in. Wide; Weight 2 Lbs. Each	2.20
No. 148—Matches ⅝ in. Boards; Cuts Groove ¼ in. Wide; Weight 2½ Lbs. Each	2.20



SKEW CUTTER, FILLETSTER AND RABBET PLANES

This Plane has an extra wide Cutter; the Fence and Depth Gauge can be attached to either side for right or left hand work; has two adjustable spurs. By removing depth gauge Fence and Arm can be used as a Rabbet Plane.

	Each
No. 289C—8½ in. Long, 1¾ in. Cutter, Japanned	$1 75

Weight 4 Lbs. Each

IMPROVED DADO

No 39—8 in. Long, Equipped with Skew Cutters, Adjustable Depth Gauge and Two Adjustable Spurs; Used for Grooving or Cutting Dados, etc.; Japanned Finish.

Width Cut, In.	¼	⅜	½
Each	$1 65	1 65	1 65

Width Cut, In.	⅝	¾	⅞	1
Each	$1 65	1 65	1.65	1 65

Weight 1¾ Lbs. Each

DUPLEX RABBET AND FILLETSTER

	Each
No. 78—8½ in. Long, 1½ in. Cut; Japanned Iron Stock and Fence; Weight 3 Lbs. Each	$1 65

The Arm for Fence screws into either side of stock, making a Right or Left Hand Fillister with Depth Gauge and Spur, for working across the grain. Inserting the Cutter in the Forward Seat makes a Bull Nose Rabbet.

IMPROVED RABBET

While perfectly flat on one side can be used with right or left hand fitted with Depth Gauge; those fitted with a spur are for working across the grain. Body and Handle are Japanned; Polished Set Screw.

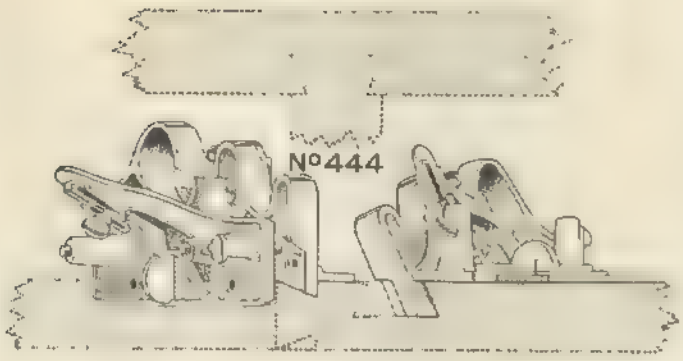
Without Spur	Each
No. 180—1½ in. Cut, 8 in. Long.	$1 10

With Spur	Each
No. 190—1½ in. Cut, 8 in. Long	$1 25
No. 191—1¼ in. Cut, 8 in. Long	1 25
No. 192—1 in. Cut, 8 in. Long.	1.25

Average Weight 2½ Lbs.

IRON PLANES

STANLEY COMBINATION DOVETAIL TONGUE AND GROOVE PLANE



This most novel tool accomplishes a result sought for many years by wood workers in general, namely, to form a dovetail tongue and groove with one hand tool.

This result was reached by designing a Plane which at one setting cuts a groove with a cutter having a *horizontal* edge guided by an *obtique* fence (angle of 20 degrees), and in the other setting cuts a tongue with a [illegible] *tique* edge of the same angle guided by two fences at right angles to each other, one being parallel to one side of the cutter.

The operation of the Plane is simple, and the accurate and perfect fitting joints obtained, both parellel and tapering, will convince the user of the utility of this unique and original tool

The Plane is handsomely nickel-plated, and packed in a neat wooden box

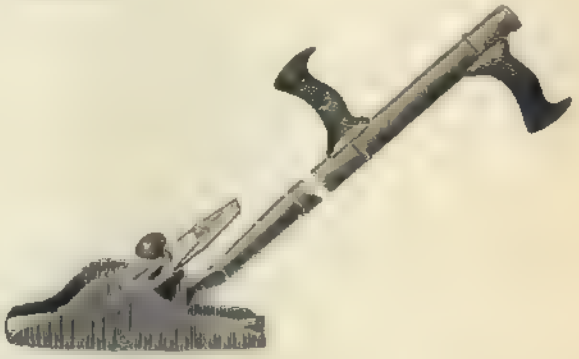
Full instructions for operating accompany each Plane.

No. 444. Dovetail tongue and groove plane, complete, list each..... $6 00

STANLEY FLOOR PLANES

Adjustable

No. 11½. Floor plane, 2⅜ in. cutter, each.....$3.15



Weight about 10 pounds, length of handle 45 in.

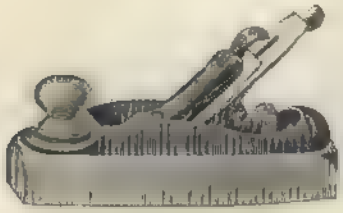
***No. 74.** Floor plane, 10½ in. in length, 2⅜ in. cutter, each . $4 95

*Not carried in stock

WOOD BOTTOM PLANES

BAILEY ADJUSTABLE

Smooth



Handled Smooth

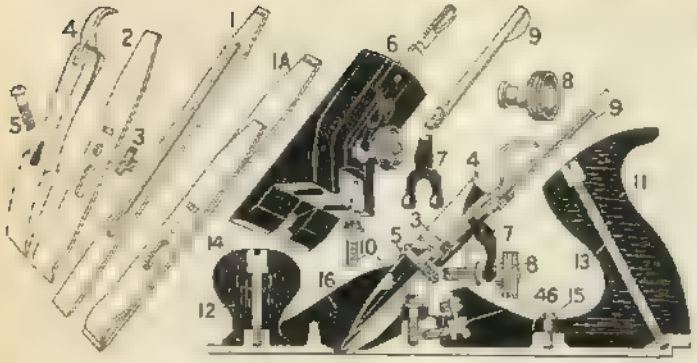
Jack, Fore and Jointer

No. 21. Smooth, length 7 in., 1¾ in. cutter, each.....$1.50
No. 22. Smooth, length 8 in., 1¾ in. cutter, each..... 1 50
No. 23. Smooth, length 9 in., 1¾ in. cutter, each..... 1.50
No. 24. Smooth, length 8 in., 2 in. cutter, each..... 1.50
No. 35. Handle, smooth, length 9 in., 2 in. cutter, each 1 90
No. 36. Handle, smooth, length 10 in., 2⅜ in. cutter, each 2 05

No. 26. Jack, length 15 in., 2 in. cutter, each. $1 65
No. 27. Jack, length 15 in., 2⅜ in. cutter, each 1 90
No. 28. Fore, length 18 in., 2⅜ in. cutter, each 2 05
No. 29. Fore, length 20 in., 2⅜ in. cutter, each.. 2 05
No. 30. Jointer, length 22 in., 2⅜ in. cutter, each.. 2 20
No. 31. Jointer, length 24 in., 2⅜ in. cutter, each 2 30
No. 32. Jointer, length 26 in., 2⅜ in. cutter, each. 2 40
No. 33. Jointer, length 28 in., 2⅜ in. cutter, each 2 46

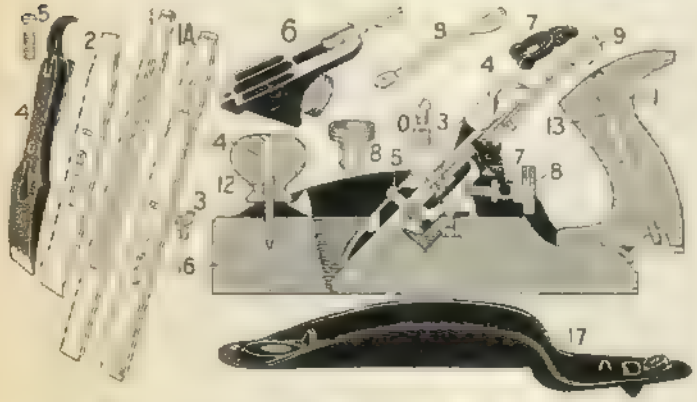
One in a paper box

PRICES OF PLANE PARTS



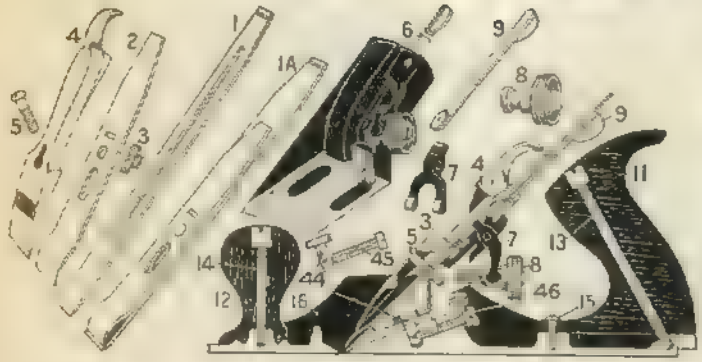
"BAILEY" IRON PLANES

No.	Name of Part	No. of Plane	1	1 1/2	2	2 1/2	3	4	4 1/2	5	5 1/2	6	7	8
1	Body	1												
2		18												
3		24												
4														
5														
6		37												
7	Adjusting Lever													
8	Adjusting Nut													
9														
10	Frog Screw													
11														
12														
13		16												
14		24												
15														
16	Plane Bottom													
17	Lever Cap Screw													



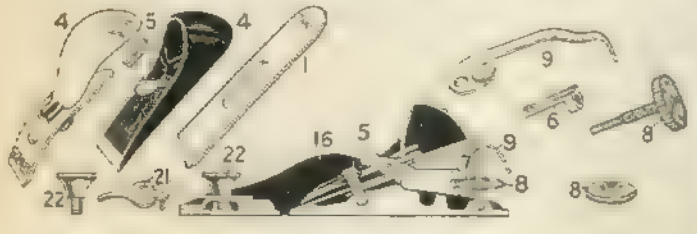
"BAILEY" WOOD PLANES

No.	Name of Part	No. of Plane	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Wood Bottom	5													
	Wood Bottom														
2															
	Cap Screw														
	Lever Cap Screw														
	Adjusting Lever														
	Adjusting Nut														
11	Plane Handle														
12	Plane Knob														
	Handle Bolt & Nut														
14	Knob Bolt & Nut														
15	Plane Bottom														
16	Iron Cutter														



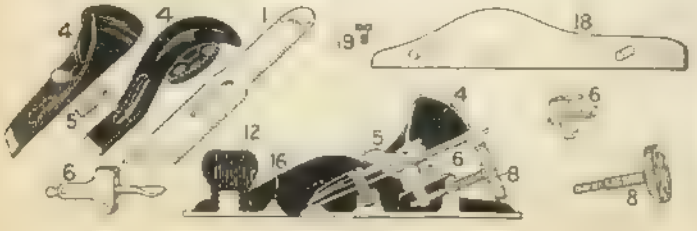
"BED ROCK" PLANES

No.	Name of Part	No. of Plane	602	603	604	604½	605	605½	606	607	608	606
	Wood Bottom	5										
	Wood Bottom											
	Cap Screw											
	Adjusting Lever											
	Adjusting Nut											
13	Plane Knob											
	Handle Bolt & Nut											
44												
45												
46												



"BAILEY" AND STANLEY BLOCK PLANES

No.	Name of Part	No. of Plane	9	9½	10	10½	11	12	13	14	15	15½
1												
4												
	Lever Cap Screw											
6	Frog Complete											
7	Adjusting Lever											
8	Adjusting Nut											
21												



STANLEY BLOCK PLANES

No.	Name of Part	No. of Plane	100 101	102	103	110	120	130	131	140	220	221
1												
4												
8	Adjusting Nut											
12												
16	Plane Bottom											
18												
19												

PRICES OF PLANE PARTS

SCRAPER AND CHAMFER PLANES

No.	Name of Part	No. of Plane	12	12½	212	212½	80	85	86	87	222	225
3	Single Plane Iron		$ .20	.20	.20	.20	.20	.20	.20	.20	.20	.20
4	Lever Cap		.20	.25	.20		.20	.20	.15	.15	.10	.10
5	Lever Cap Screw								.05	.05		.05
6	Frog Complete		.60	.70	.35	.15	.60	.60				
7	Adjusting Nut		.10	.10	.05							
8	Frog Screw						.05	.05				
11	Plane Handle		.80	.80	.50		.25	.25	.20	.20	.30	.30
15	Plane Knob					.20	.20	.20			.15	.15
16	Handle Bolt & Nut		.15		.10	.10	.10	.10			.10	.10
17	Knob Bolt & Nut			.10	.10	.10	.10	.10			.10	.10
38	Plane Handle Screw		.15									
16	Plane Bottom		.20	.80	1.25	1.60	1.00	.80	1.10	1.20	1.50	1.50
47	Extra Wood Bottom		.50									
48	Extra Wood Button		.10									

RABBET AND ROUTER PLANES

No.	Name of Part	No. of Plane	98	98½	98½	98½	85	90	91	113	75	75½
1	Single Plane Iron		$ .30	.30	.30	.30	.30	.30	.30	.30	.30	.30
4	Lever Cap		.15	.15	.15	.15	.10	.10	.10	.10	.10	.10
15	Plane Knob						.15	.15	.15	.15		
16	Knob Bolt & Nut								.10	.10		
16	Plane Bottom		.75	.75	.75	.75	.60	.60	1.00	1.00	.30	.80
37	Cutter Bed Adj. Screw		.20	.20	.20	.20						
47	Extra Wood Cap								.25			
48	Cap Button								.25	.25		

LEVER ADJUSTMENT AND SPECIAL PLANES

No.	Name of Part	No. of Plane	36	45	122	27	4	15½	146	36	4	6
A	Double Plane Iron		$ .45	.45	.80	.45	.40	.30	.40	.40		
3	Single Plane Iron		.25	.25	.25	.25	.20	.20	.25	.25	.30	.45
4	Lever Cap		.18	.18	.15	.15	.10	.10	.15	.15		
5	Cap Screw		.05	.05	.05	.05	.05	.05	.05	.05		
6	Adj. Nut & Nut		.05	.05	.05	.05			.05	.05		
7	Lever Cap		.10	.10	.10	.10	.10	.10	.15	.15	.15	.15
8	Lever Cap Screw										.05	.05
9	Plane Base		.70	.70	.70	.70	.70	.70	.70	.70	.70	.70
10	Plane Knob		.15	.15	.10	.10	.10	.10	.10	.10	.15	.15
11	Handle Bolt & Nut		.10	.10	.10	.10	.10	.10	.10	.10	.10	.10
14	Knob Bolt & Nut		.10	.10	.10	.10	.10	.10	.10	.10	.10	.10
15	Plane Handle Screw						.05	.05	.05	.05		
16	Plane Bottom		.75	.70	.80	.75	.60	.60	.75	.80	.75	.75
17	Lever Cutting				.25	.25	.25	.25	.25			
26	Frog Adjustment											
39	Handle Rest Knob											
50	Depth Adjustment		.25	.25	.30	.25	.30	.25				

RABBET, MATCHING AND DADO PLANES

No.	Name of Part	No. of Plane	51	48	49	48	59	49	146	2	146	150
	Single Plane Iron		$ .25	.25	.25	.25	.25	.25	.25	.25	.25	.25
1	Nut				.05	.05	.05					
4	Lever Cap		.20	.20	.15	.15	.10	.10	.15	.15	.15	.15
5	Cap Screw				.05	.05	.05					
31	Fence Clamp Screw		.15				.15					
32	Fence Rod						.10					
33	Adjusting Depth Gauge		.10				.10	.10			.10	.10
1	Depth Gauge for Spurs		.10				.10	.10			.10	.10
85	Spurs with Screws		.10				.10					

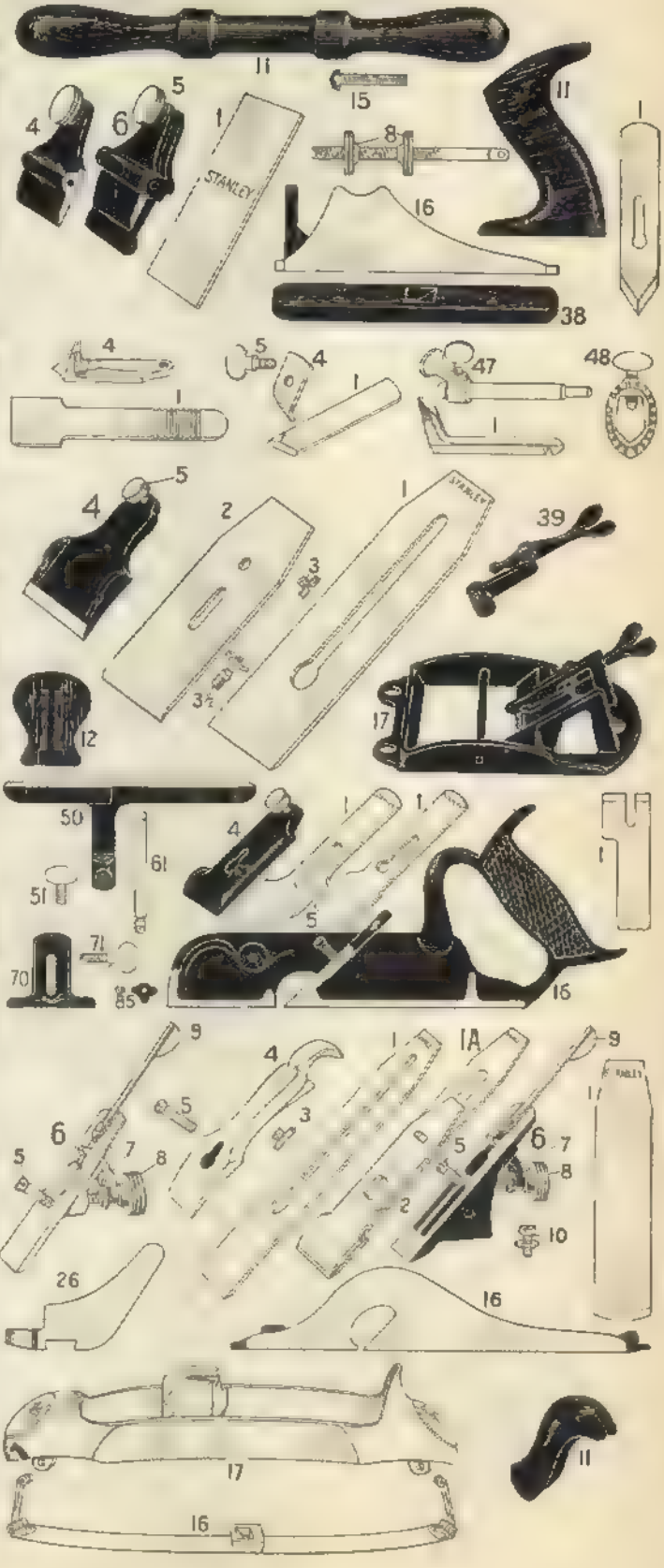
CARRIAGE, CIRCULAR AND SCRUB PLANES

No.	Name of Part	No. of Plane	40	40½	140	140½	41	41½	40	40	51	74
1A	Double Plane Iron		$ .45	.45	.45	.45	.45	.45	.45		.45	.45
1	Single Plane Iron		.25	.25	.25	.25	.25	.25	.25		.25	.25
3	Plane Iron Cap		.18	.18	.18	.18	.18	.18	.15		.15	.15
5	Cap Screw		.05	.05	.05	.05	.05	.05	.05		.05	.05
4	Lever Cap		.20	.20	.20	.20	.20	.20	.15		.20	.20
5	Adj. Nut & Screw		.05	.05	.05	.05	.05	.05	.05		.05	.05
6	Frog Complete		.55	.55	.55	.55	.55	.55	.55		.55	.55
7	Frog Adjusting Lever		.05	.05	.05	.05	.05	.05	.05		.05	.05
8	Adjusting Nut		.10	.10	.10	.10	.10	.10	.10		.10	.10
9	Rear Adj. Lever		.15	.15	.15	.15	.15	.15	.15		.15	.15
10	Cap Screw		.05	.05	.05	.05	.05	.05	.05		.05	.05
11	Plane Handle		.40	.40	.40	.40	.40	.40	.40	.40	.40	.40
15	Plane Knob		.15	.15	.15	.15	.15	.15	.15		.15	.15
16	Handle Bolt & Nut		.10	.10	.10	.10	.10	.10	.10		.10	.10
17	Knob Bolt & Nut		.10	.10	.10	.10	.10	.10	.10		.10	.10
16	Plane Bottom		.90	.90	.90	.90	.90	.90	.90	.90	.90	.90
17	Lever Cutting											
26	Frog Seat											
35	Frog Adj. Screw											
41	Frog Adj. Nut											

NOTE—In several of the Plane [illegible] parts are [illegible] by the same and different [illegible].

In these cases the corresponding parts are given the same number and when any part is not shown directly opposite the number of the Plane, it will be found in another place on the plate.

Always give Plane number and part number when ordering Cutters or parts.



IRON PLANES

Ohio Tool Co.'s

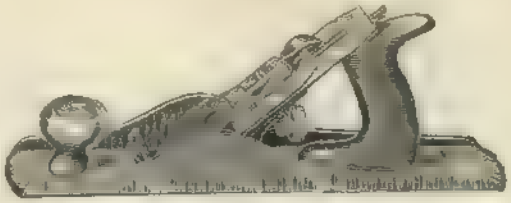
"Ohio" Iron and Wood Botton Bench Planes are fitted with specially constructed Extra Heavy Cutters

HANDLED SMOOTH

No. 01

No. 01. 5 in. in length, 1⅝ in. cutter, each..... $2.25
No. 02. 7 in. in length, 2⅜ in. cutter, each..... 2.75
No. 03. 8 in. in length, 1¾ in. cutter, each..... 3.00

JACK



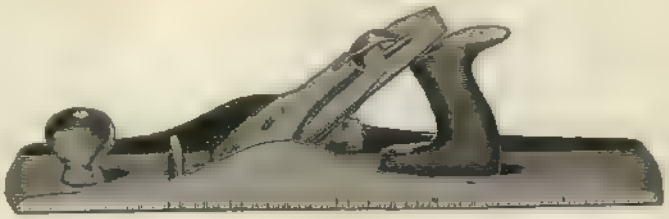
No. 05

No. 05. 14 in. in length, 2 in. cutter, each.....$3.75
No. 05¼. 14 in. in length, 2⅛ in. cutter, each..... 4.00
No. 05½. 15 in. in length, 2¼ in. cutter, each..... 4.25
No. 05¾. 15 in. in length, 2⅜ in. cutter, each..... 4.50

No. 04

No. 04. 9 in. in length, 2 in. cutter, each..... $3.25
No. 04¼. 9½ in. in length, 2¼ in. cutter, each..... 3.60
No. 04½. 10 in. in length, 2⅜ in. cutter, each..... 3.75

FORE



No. 06

No. 06. 18 in. in length, 2¾ in. cutter, each $4.75

JOINTER

No. 07

No. 07. 22 in. in length, 2⅜ in. cutter.....each, $5.50
No. 08. 24 in. in length, 2⅝ in. cutter.....each, 6.50

BOXMAKERS' PLANE

Note Low Angle Bit

No. 0405. 14 in. in length, 2 in. cutter, each.....$4.00
One in a paper box

IMPROVED SCRUB PLANE

No. 040. Iron Stock, 9½ in. in length, 1¼ in. cutter, each $1.00

FORGES

BUFFALO FORGE CO.

AGRICULTURAL OR FARM FORGE

A substantially built Lever Forge for general work; Used by Farmers especially, and also by Dentists, Plumbers, etc.; Simple design; is the best at the price; Fire Pan is rust-resisting, and Blower gives blast sufficient to produce welding heat with moderate speed; fitted with Sheet Iron Wind Shield and well braced legs, screwed tightly into Hearth.

Nos.	Style of Hood	Diameter Hearth, In.	Wt. Each, Lbs.	Each
150	Shield	18	65	$14.00
151	Half Hood	18	70	16.00

STANDARD BLACKSMITHS' LEVER FORGE

A very simple and durable Forge that will give satisfaction in general blacksmith work; Can be used on heavy work with successful results; Blower is easy to operate and will give a large steady Blast; Fan case is 14 in. Diam., with Steel Fan Blades, accurately pitched and balanced, riveted to cast Spider; a Malleable Iron Gate permits of Tuyere being cleaned of ashes.

Nos.	Style of Hood	Size of Hearth, In.	Wt. Ea., Lbs.	With Tank Each	No Tank Each
850	Half Hood	32x45	300	$55.00	50.00
999	Half Hood	25x36	200	22.00	20.00
998	Shield	25x36	195	20.00	18.00

Note—No. 850 drives by means of a Belt over Wheel, and has Fly Wheel and Friction Clutch; Nos. 999 and 998 have Ratchet drive in place of Belt.

No. 7

No. 8

BENCH FORGE

These Forges are for the use of Jewelers, Tinsmiths, Locksmiths, Farmers, etc., for light work; placed on a Bench while in use; they will provide a welding Heat on 1 in. Iron in Ten Minutes, Cast Iron Legs, 6 in. Fan Case.

Nos.	Style of Hood	Diam. Fire Pan, In.	Wt. Each, Lbs.	Each
7	Shield	15	42	$13.00
8	Half Hood	15	44	15.00

CRANK DRIVEN FORGE

Blower is operated by a Crank attached to open Gearing; light running and lasting; some Smiths prefer a crank driven forge to the Leaver style; there is no ratchet action, being driven constantly in one direction, right or left-handed; produces powerful Blast with little effort.

Nos.	Style of Hood	Diam. Fire Pan, In.	Wt. Each, Lbs.	Each
155	Shield	18	65	$14.00
153	Half Hood	18	70	16.00

BLACKSMITHS' BALL BEARING POST DRILLS

BUFFALO FORGE CO.

The only Line of Low Priced Drills which are equipped with Ball Bearings and Polished Solid Steel Shaft. These Drills will work up to their rated capacity without excessive expenditure of power. Bearings are bored and reamed from the solid metal (No Babbitt used, to be replaced later) the Tables are Lathe turned and easily adjusted to any point of run, sliding up and down or turning entirely out of way. Used for Drilling Tires or other Heavy Work, Tables are slotted for clamping down or bolting on work so several holes can be bored by turning Table without removing work.

No. 152

HAND AND AUTOMATIC FEED

One Speed

A few turns of a Small Hand Screw gives three changes of Automatic Feed, for Fine, Medium or Coarse Cut. Double Drive Gears; Buffalo Sure Grip Drill Chuck.

No. 148

HAND AND AUTOMATIC FEED

One Speed

A Drill for Medium Work; Ball Bearings, Hand and Automatic Feed adjustable to three speeds, for Fine, Medium or Coarse Cut. Heavy Compound Gears, Buffalo Sure Grip Drill Chuck.

No. 145

HAND FEED ONLY

One Speed

Adapted to light work; Has Ball Bearings at End Thrust of Top of Feed Screw. Direct Gear; Set Screw Drill Chuck.

An "A" after the Number means that Drill is Complete with 8 in. Tight and Loose Pulleys for Belt Power

Nos.	Capacity	Run of Feed, In.	Run of Table, In.	Diam. Drill Spindle, In.	Bore of Drill Spindle, In.	Length Overall, In.	Weight Each, Lbs.	Each
145	⅝ in. Center, 12 in. Circle	3½	9	1	⅝	38	60	$ 6.00
148	1 in. Center, 12 in. Circle	8	9	1	⅝	38	70	8.00
152	1¾ in. Center, 14 in. Circle	8	12	1⅛	..	38	80	10.00
152A	1¾ in. Center, 14 in. Circle	8	13	1⅛	..	38	105	13.00

Spindle can be bored to ⅝ in. or 41/64 in., if requested, at No Extra Cost

DRILL CHUCKS

BUFFALO SURE GRIP DRILL CHUCK

Insert Drill in chuck, give Collar a slight turn either way and Drill is held absolutely tight; it can neither turn or slip—on any kind of work. To remove Drill simply turn back Collar.

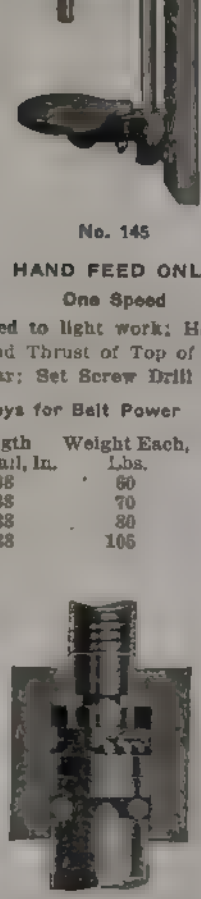
Chuck is opened and closed with one hand. It cannot work loose or stick. No threads to strip. No Set Screw to twist off or break.

Only two pieces—A Key resting in a slot, milled in drill spindle and a Collar turning on drill spindle. Inner side of Key engages flat side of Drill and outer side of Key rests against inner surface of Collar. Collar is bored eccentric on one side, allowing sufficient movement to Key so Drill can be freely inserted, or removed, from Chuck. By turning Collar the Key is forced against Drill and prevents slipping or turning.

Index marks on Collar and Spindle, when in line, show that Chuck is open.

Buffalo Drill Chucks.....$2 00

For Drill Bits, see Page 739



Sectional view of Ball Bearings

BUFFALO BALL BEARINGS

Note location of ball bearings at Top or end thrust of feed screw, where there is from 5 to 10 times more friction than anywhere else on the drill.

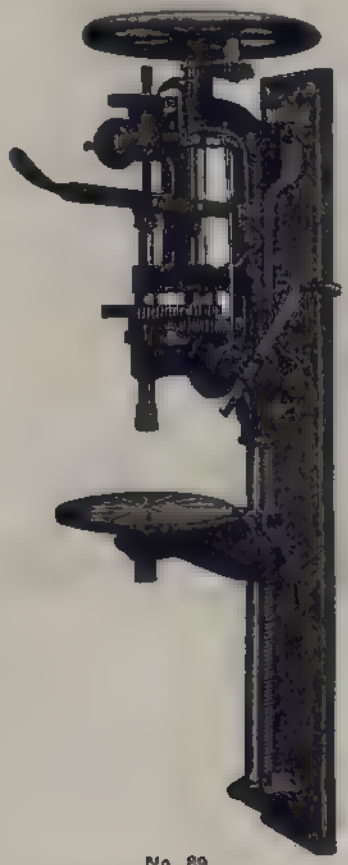
They are the most perfect Ball Bearings of their kind made; especially designed to resist the heavy pressure of the Feed Screw against top of Spindle; 90% of all friction at this point is thereby eliminated.

The finest Race of Balls, ground and finished as smooth as glass, fits snugly between two die-steel plates, turned from the solid bar and hardened. No adjustment is ever needed.

BLACKSMITHS' BALL BEARING POST DRILLS

BUFFALO FORGE CO

Recognized as the World's Standard in Labor and Time Saving Drilling Machines and Each Drill is Equipped with **Combination Automatic Feed and Lever Feeds**, and Instantaneous **Quick-return Spindles**, filled with **Buffalo Sure Grip Drill Chucks**, which a Drill cannot slip or turn. There are **Two Speeds**, for light and heavy work, and **Three Adjustments** on the Automatic Feed of Fine, Medium and Coarse feeds. Wheel **Holding Attachment** with Each Drill, as well as Power Pulleys. Shaft and Spindles are Polished Steel. Tables are Lathe Turned and can be swung out of way or slide up and down. Tables slotted for clamping down or bolting on work and may be turned so several Holes can be Bored before removing. **Rigid Frame** with Extra Journal Bearings. When using Lever Feed, Feed Drill can be raised or lowered to suit work being done; **Hand Painted and Finely Finished.**



No. 89
HAND AND POWER

For Heaviest Work; The Horizontal Fly Wheel mounted on Top reduces the number of moving parts and eliminates the excessive Friction of overhung Fly Wheels; it rotates on Ball Bearings, and is driven through planetary gears which increase the speed to three times that possible with direct gearing, without greater expenditure of power.

No. 94
HAND AND POWER

For Heavy Work; In this Drill the Fly Wheel Speed is independent of the Spindle, giving full momentum where most needed—on slow heavy work, where other makes fail; From 50 to 90% of Time can be saved when drilling small Holes, Boring in Wood, Reaming or Countersinking with this Drill.

No. 99
HAND AND POWER

For Medium Heavy Work in Blacksmith Shops, Wagon Works, etc.; a quarter Turn of the Feed Nut Lever, on Drill Head, changes from Automatic to Lever Feed or vice versa; By removing Table, the Fork can be used as a Wheel Support.

An "A" after the Number, means that Drill is Complete with 8 in. Tight and Loose Pulleys for Belt Power

Nos.	Capacity	Run of Feed, In.	Run of Table, In.	Diam. Drill Spindle, In.	Bore of Drill Spindle, In.	Length Overall, In.	Weight Each, Lbs.	Each
89	1⅝ in. Center, 22 in. Circle	6¼	24	1⅝	4 1/16	73	425	$65.00
89A	1⅝ in. Center, 22 in. Circle	6¼	24	1⅝	4 1/16	73	450	70.00
90	1⅝ in. Center, 22 in. Circle	5¼	24	1⅝	4 1/16	73	420	55.00
90A	1⅝ in. Center, 22 in. Circle	5¼	24	1⅝	4 1/16	73	445	60.00
94	1½ in. Center, 21 in. Circle	4½	18	1¼	⅛	51	270	40.00
94A	1½ in. Center, 21 in. Circle	4½	18	1¼	⅛	51	295	44.00
98	1¼ in. Center, 18 in. Circle	3½	18	1¼	⅛	46	160	25.00
98A	1¼ in. Center, 18 in. Circle	3½	18	1¼	⅛	46	185	29.00
99	1¼ in. Center, 15½ in. Circle	3	13	1⅛	⅛	40	125	18.00
99A	1¼ in. Center, 15½ in. Circle	3	13	1⅛	⅛	46	150	21.00

For Drill Bits see Page 739

TIRE SHRINKERS

Used in Blacksmith Shops, Carriage and Wagon Works

These Machines can be Operated by One Man; Occupy Little Space, will not Kink the Tire; the Dogs which grip the Tire are chill faced, hold perfectly and can be resharpened or replaced at small expense.

STODDARD

	Each
No. 1 For Tires to 2 in. Wide. Weight 100 Lbs.	$14 00
No. 2—For Tires to 4 in. Wide. Weight 225 Lbs.	22 50
No. 3 Special 4 in. Tire Machine. Has a set of Loose Jaws which can be Adjusted for Large and Small Circles and for Upsetting Axles up to 1¾ in. Square. Weight 275 Lbs.	29 00
No. 4—For Tires to 6 in. Wide; Wt. 400 Lbs.	36 00
No. 5—Special 6 in. Tire Machine, also Takes Axles up to 2 in. Square	45 00

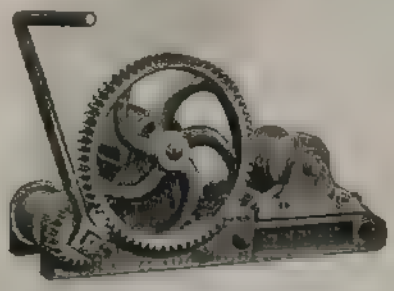
Weight 480 Lbs.

MOLE ANTI-KINK

Made entirely of iron; has Hardened Steel Plates in the Dogs for gripping the Tire. Plates easily sharpened and renewed

	Each
No. 20 Size 2. Has 3 in. Bed and is Adapted to all but Heaviest Work. Wt. 225 Lbs.	$21 00
No. 30—Size 3, Has 4 in. Bed and is Adapted for Heavy Wagon and Truck Tires; Weight 300 Lbs.	25.00

TIRE BENDERS



Used in Blacksmith Shops, Carriage and Wagon Works, Etc.

PERFECTED

	Each
No. 22—Will take 4x¾ in. Tire, Bend Circle from 12 in. to 12 Ft. Center Top Roll is Removable, allowing a Heavy Tire to be taken out without Springing Ends Apart. Body is One Solid Piece of Cast Iron; Rolls are Chilled Iron, Turned Perfectly True and are Adjustable	$25.00

Weight 150 Lbs. Each

IMPROVED, DOUBLE GEARED

	*Each
No. 03—Has Turned Rollers and Bearings, will bend 5 in. Tire, or smaller, to a Circle 24 in. Diameter or Larger; In bending Heavy Tires 2 Cranks can be used, thus giving Double Power.	$21 00

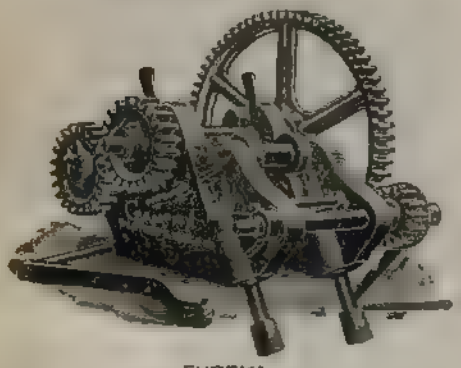
Weight 160 Lbs. Each

SIMPLICITY

	*Each
No. 02—With Gear and Pinion, has Turned Rollers and Bearing, and will bend 3½ in. Tire or Smaller to a Circle 24 in. in Diam. or Larger	$14 00

Weight 85 Lbs. Each

TIRE BENDERS

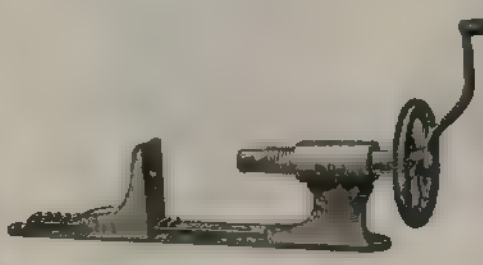


EUREKA

	Each
No. 200—Strong and Powerful; Adjusting Screws at Each End of Rolls. Graduated Indicator on Each Side. Collars on Ends of Rolls Prevent Tire from Twisting and make both Ends Meet. Two Speeds, Bends Fifth Wheels and 6x1 in. Tires.	$30 00

Weight 300 Lbs. Each

TIRE DRILLS



HORIZONTAL

	Each
No. 01 Solid Standard, Length of Base 28 in.; Opens 12 in.; Cast Iron Frame, Japanned. Steel Spindle and Bearings; Takes B.t Stock Drills	$4 00

Weight 30 Lbs. Each

All Above, Open Stock

TIRE MEASURING WHEELS

GRADUATED

Used by Blacksmiths and Carriage Makers for Measuring Inside of Tire and Outside of Wheel; also used by Boiler Makers.

	Each
No. 24—Wheel is Drop Forged; Malleable Iron Handle; the Figures and Lines are cut into the metal. It is a perfect running wheel, tires are fully graduated in 24 inch circumference. The [illegible] saves [illegible] marking with chalk and no chain made of metal, is light, accurately fitted, reliable, handy and strong.	$2 00

Weight 1¾ Lbs. Each

Oakland

The Past, Present and Future of "The Car With a Conscience"

THE Oakland has a successful past, a remarkable present and is bound to have a wonderful future. From a dealer's standpoint, the Oakland line looms up prominently as ***the*** important figure in the automobile industry, for it represents "the happy medium" in motor car construction.

1912 was the most prosperous year in the history of the company and our plans for 1913 insure even a greater year.

But regarding 1912. The Oakland was the one big surprise of the year.

No other single company, making motor cars, regardless of the selling price of its product, attracted the attention which was given the Oakland. It was truly an individual, distinctive line of motor cars. And they made a "hit" everywhere. In the great selling centers of New York, Chicago, Boston, Philadelphia, Omaha, San Francisco and Los Angeles, the "Oakland" made good -received a royal welcome. The popularity of the car in these cities was astounding.

The Oakland came into its own. It has a firm foundation for its popularity and stability. It is today one of the standard motor cars. And this popularity is bound to grow in the future.

And we have earned this position. This statement is not made with a desire to appear egotistical, for we do not want to give you that impression. What we want to convey to you is that the position has been honorably and honestly achieved by building good motor cars, superior motor cars, both mechanically and artistically.

OAKLAND GREYHOUND 6-60— 130 Inch Wheel Base. $2400.00

And now for 1913.

Clever phrases do not make serviceable motor cars. Pretty pictures do not make artistic looking automobiles. This description and accompanying photographs of 1913 Oaklands truthfully describe our cars for the coming year.

The Oakland line for 1913 is the ideal combination for dealers to concentrate their efforts, to make money and to satisfy and please their customers; for it is a wonderful line of motor cars in design, in quality and in appearance. Exclusive features, beautiful body lines and sound mechanical principles are to be found in every model. Unit power plants are used exclusively.

Here is the line briefly described. Read it.

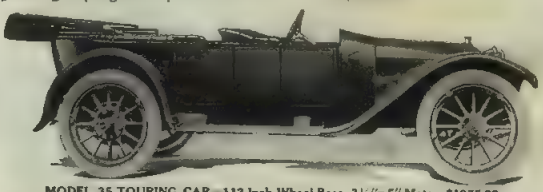
The Greyhound 6-60—the new Oakland six cylinder chassis has a wheel base of 130 inches, double drop frame, unit power plant, cone clutch, sliding gear transmission, full floating rear axle, demountable rims, German silver radiator "V" shaped, 10 inch upholstering, full nickel trimmings, and equipped with electric lighting and ignition system and a self starter at $2400. There will be mounted on this chassis four, five and seven passenger bodies, and a Raceabout for two.

Model 45, seven passenger Limousine; wheel base 120 inches, double drop frame, unit power plant, selective sliding gear transmission, cone clutch, Bosch magneto, $3000.00.

Model 42 chassis, 116 inch wheel base, double drop frame, unit power plant, cone clutch, sliding gear transmission, full floating rear axle, demountable rims, German silver radiator "V" shaped, 10 inch upholstering, full nickel trimmings and equipped with electric lighting and ignition system and a self starter at $1600.00. There will be mounted on this chassis a five passenger body, a close coupled four passenger body and the famous Sociable Roadster (three passengers - single seat). There will also be built a smart four passenger coupe on this chassis to list at $2500.00.

Model 40 chassis, five passenger touring car; 114 inch wheel base, single drop frame, unit power plant, selective sliding gear transmission, cone clutch, demountable rims, full nickel trimmings, and equipped with a self starter at $1450.00.

Model 35 chassis, five passenger touring car; wheel base 112 inches, single drop frame, unit power plant, sliding gear transmission, cone clutch, demountable rims, full nickel trimmings and electrically lighted at $1075.00. There will also be furnished on this chassis a three passenger (single seat) Sociable Roadster at $1000.00.



MODEL 35 TOURING CAR—112 Inch Wheel Base, 3½"x 5" Motor, $1075.00.

Isn't this a wonderful line of cars?

You will be able to reach out and command trade from every quarter—from the man desiring the Model 35 Runabout at $1000.00 to the purchaser of a car "De luxe" like the Greyhound 6 60 at $2400.00. This line gives you a far reaching latitude in which you will be able to do business. It makes you an important figure in your local field.

Models 35, 40, 42 and 60—a car and type for every man—for the beginner who is just starting motoring for the man who has graduated from the medium powered car and finally for the man who doesn't like to take anybody's dust. All styles of bodies and each body is a beauty, too.

For 1913 we have adopted on a number of the models a low, overslung, double drop frame.

This construction gives the car a low center of gravity, keeping the machine on the road better. It makes the car safer to handle at high rate of speed and improves the riding qualities generally. The side swaying of the body is reduced to the minimum because the car "hugs the ground." Longitudinal rocking which frequently spoils easy riding even in high priced cars, does not occur in this construction and the danger of skidding is almost done away with.

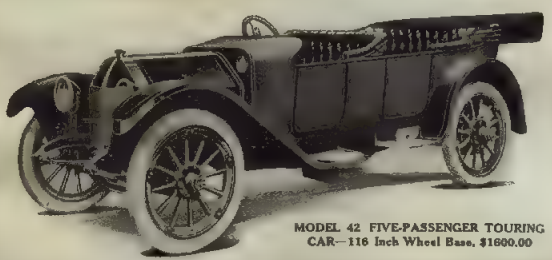
The use of a low drop frame allows the elimination of a number of sheet metal parts like the side aprons, spring pockets, step hangers and running boards. As you know these parts are subject to rattle owing to the thinness of the material which must be used. We have replaced all these parts by four aluminum steps (see cuts of cars) which will act at the same time as fender brackets.

The Oakland six cylinder chassis represents two years of earnest work.

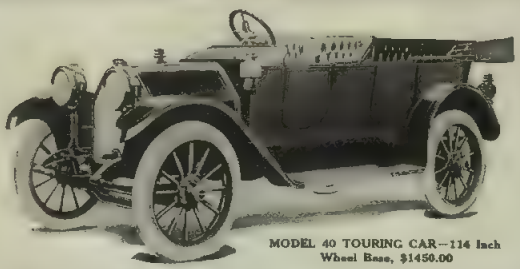
The successful automobile manufacturer, with a desire to stay in the business, cannot afford to take any chances with his reputation, especially if it is a good one.

We do not propose taking any. The Oakland "Six" is offered with a full understanding of the many superior points and advantages incorporated.

The Oakland "Six" will be known as the "Greyhound Six-Sixty," a name which naturally belonged to the car after the many strict and hard tests to which it was put. These trials have been gruelling; they had to be satisfying.



MODEL 42 FIVE-PASSENGER TOURING CAR—116 Inch Wheel Base, $1600.00



MODEL 40 TOURING CAR—114 Inch Wheel Base, $1450.00

The marketing of an Oakland Six was no small undertaking. We couldn't afford to market an experiment. It had to be a "Six" that would not only be entitled to a place alongside the rest of the Oakland line, but be a leader and have enough superior points of its own to be able to claim more than passing attention. In other words, the new car had to be as distinctive in comparison with the other Sixes on the market as have been our Fours.

This car has given a good account of itself in the many strenuous tests. It has been driven, summer and winter, on every sort of road. Through the snow and ice, from Pontiac to Buffalo and return, was one of the trips; from Detroit to Indianapolis and return, in record breaking time, was another. Thousands of miles were covered over the sandy roads of Michigan. All this has been done with but one thought—that of finding a single weakness.

In making up our 1913 line the dealer, as heretofore, has been our first thought. The success of the dealer is linked closely with that of the manufacturer. This we appreciate. Every Oakland dealer is akin to the home organization.

The automobile manufacturer has two important duties to perform—first the building of a reliable product, a product which will be a pride and honor to its makers. Secondly—that of satisfying the dealer, enthusing him with that product, and working in close harmony with him. That's the spirit of this organization.

The output for 1913 is being doubled. We are extending our distribution. We intend covering and being represented in every county in the United States and in the provinces of Canada. Territory is open in various parts of the country. We are going to add a number of dealers who have the proper qualifications to represent us. If you are a progressive dealer, thoroughly alive to the opportunity we are offering to you, fill out the attached coupon. Write us at the same time, giving us full particulars as to the number of years you have been in business, whether you have a garage and show-room or propose going into the automobile business, and such other information as will be of interest to us. If you request it, we will send photographs of our complete line, specifications and such other data as will be of interest to you.

COUPON

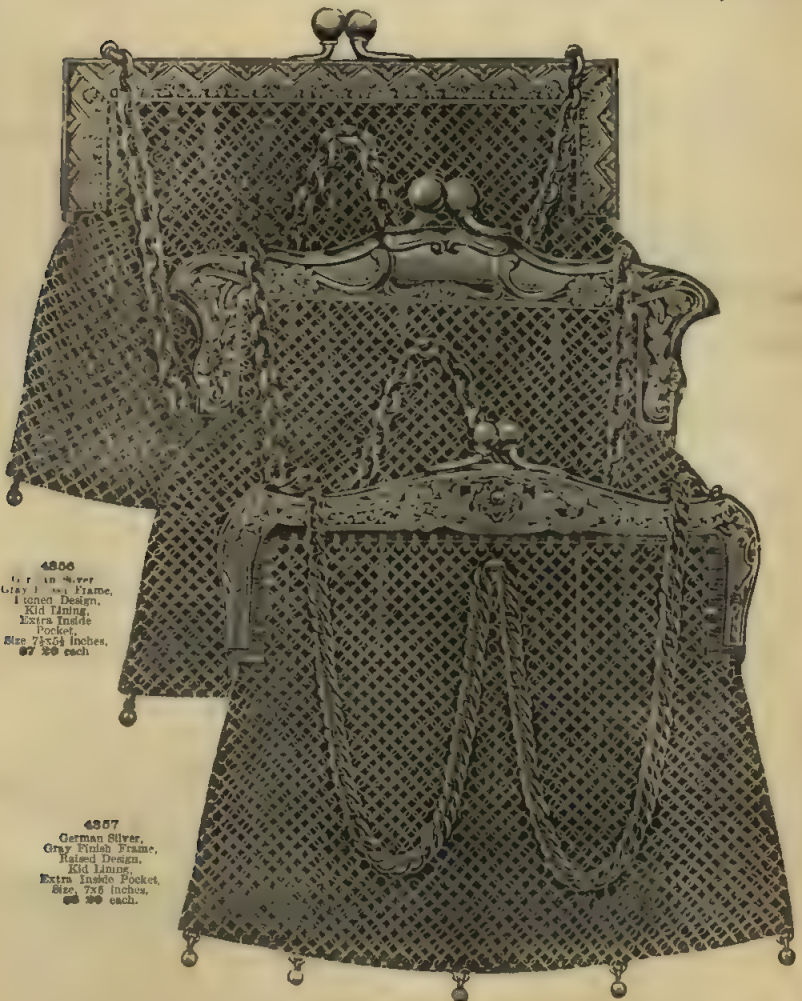
Oakland Motor Car Co., Pontiac, Mich.
Gentlemen: I am interested in the Oakland line for the following territory, 1913.
Please send me full particulars.

Oakland Motor Car Company

210 Oakland Blvd., Pontiac, Mich.

Ladies' Chatelaine Mesh Bags

German Silver—Well Made—Illustrations Are Reduced Size.



4356
German Silver
Gray Finish Frame,
Etched Design,
Kid Lining,
Extra Inside
Pocket,
Size 7½x6¼ inches,
$7.20 each

4357
German Silver,
Gray Finish Frame,
Raised Design,
Kid Lining,
Extra Inside Pocket,
Size, 7x6 inches,
$6.00 each.

4358 German Silver, Gray Finish Frame,
Etched Design Kid Lining, Extra Inside Pocket,
Size, 6¼x5½ inches, $10.00 each.

All Prices Subject to the Regular Discount, Except Those on Diamonds. Pages 1 to 16.

HAMILTON RIFLES

No. 27. Hamilton rifle is a take-down rifle, 30 in. long over all with 16 in. tapered barrel. Open adjustable rear sight and knife front sight. Chambered for .22 caliber short and long rim fire cartridges. Flat stock and forearm of gum-wood, with walnut finish, weight 2½ lbs.....each, $1.50

One rifle in a box, 10 in a case

No. 027. Hamilton rifle is the same as No 27 except that the stock and forearm are made of walnut, handsomely turned and finished, weight 2¾ lbs.....each, $1 75

One rifle in a box, 10 in a case

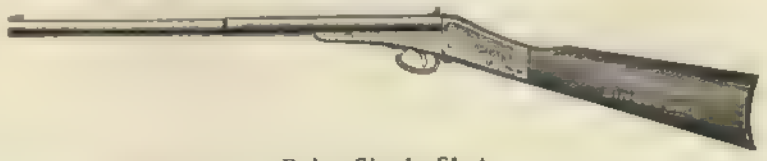
Hamilton rifles are guaranteed against defective material and workmanship The barrel is not guaranteed against injury when BB or CB caps are used

DAISY AIR RIFLES

Little Daisy

No. 20. Little Daisy, made from steel handsomely nickel plated fitted with black walnut stock, length 29 in., weight 1 lb 2 oz.....per dozen, $6.00

One dozen in a box



Daisy Single Shot

No. 2. Model C, black walnut stock, nickel plated steel barrels of one piece, fitted with peep sight in rear and Rocky Mountain sight in front Shooting barrel is removable and allows the use of either air rifle shot or 17-100 darts. Shoots strong and accurately, length 31½ in., weight 1 lb. 11 oz .....per dozen, $12.00

One dozen in a box

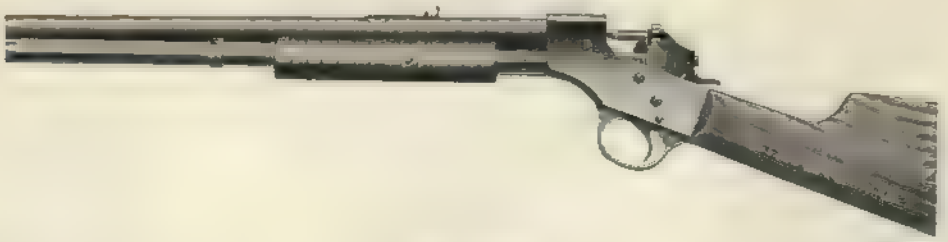
Daisy Repeater

No. 1. Model C, automatic repeater with break-down action Magazine holds 350 air rifle shot. Walnut stock, nickel plated steel barrel of one solid piece, fitted with peep sight in rear and Rocky Mountain sight in front, length 31½ in., weight 1 lb 11 ozs. .....per dozen, $15.00

One dozen in a case

STEVENS' REPEATING RIFLES

VISIBLE LOADING



.22 Caliber

20 in. round barrel, case hardened frame, varnished stock and slide saddle, rubber butt plate, extreme length, 35 in., weight 4½ lbs. Magazine holds 11 .22 long rifle, 13 .22 long or 15 .22 short rim fire cartridges.

No. 70LR. For .22 short, .22 long or .22 long rifle rim fire cartridges, bead front and elevating rear sights ..... each, $8 00

HIGH POWER

.25, .30-30, .32 or .35 Caliber

22 in. round, nickel steel barrel, solid steel, blued, receiver, action, coil main spring. Stock, walnut with checkered steel butt plate, walnut forend with blued steel cap. Sights, German silver blade front and sporting rear. Tapped for tang and telescope sights.

Ammunition—Any standard make of rimless cartridges marked Rem. auto loading. Six cartridges may be carried, five in the magazine and one in the barrel.

No. 425. Stevens high power repeating rifle, weight about 7 lbs. ..... each, $20 00

SAVAGE RIFLES

MODEL 1903 REPEATER

.22 Caliber

The Model 1903 hammerless repeater shoots .22 short, .22 long and .22 long rifle rim fire cartridges in one arm without change of mechanism. The magazine is so constructed that it will carry the three lengths of cartridges separately or collectively. When the last cartridge is fired the mechanism is automatically locked, thus preventing the snapping of the firing pin on an empty chamber. Has side ejection. It is easily taken apart for cleaning and carrying.

Model 1903 Savage, 24 in. octagon barrel, weight 5¼ lbs. ..... each, $12.00

MODEL 1905 TARGET RIFLE

.22 Caliber

Chambered for the short, long and long rifle rim fire cartridges and carries the three lengths without change of mechanism. The trigger is equipped with an adjusting screw to regulate the tension of the trigger pull. Walnut stock, Swiss butt plate. The sights are Savage micrometer and ivory bead. Can be easily taken apart.

Model 1905 Savage, 22 in. round barrel, weight 4¾ lbs. ..... each $6.50

DAISY AIR RIFLES

500 Shot

No. 30. Automatic repeater with lever action. Magazine holds 500 air rifle shot and loads by operating the lever. Shooting barrel is fitted with the Daisy shot retainer that enables the user to shoot downward without loosing the shot. Black walnut stock with blued steel butt plate. Length 33 in., weight 2 lb 7 ozs., shoots with great force and precision .....per dozen, $21.00

One half dozen in a box

1000 Shot

No. 3. Model B, magazine repeater, lever action. Magazine holds 1000 air rifle shot and loads by operating the lever. Shooting barrel is provided with the Daisy shot retainer permitting the user to shoot downward without loosing the shot. Black walnut stock, highly polished, with blued steel butt plate, length 36 in., weight 2 lbs. 9 ozs., shoots with great force and precision .....per dozen, $24.00

One half dozen in a box

1000 Shot

No. B3. Daisy special, magazine repeater lever action. Magazine holds 1000 air rifle shot and loads by operating the lever. Provided with Daisy shot retainer. All metal parts are polished and blued, selected walnut stock hand polished. Each gun in a handsome box with large cover. Length 36 in., weight 2 lbs. 9 ozs. An extra strong and accurate shooter.....per dozen, $30.00

LITTLE DAISY POP GUN

The "Little Daisy" pop gun is built like an air rifle, made entirely from steel, handsomely nickel plated and fitted with genuine black walnut stock. Length 15 in., weight 7 oz. Shoots a cork and makes a loud noise but with absolutely no danger.

Little Daisy Pop Gun.....per dozen, $3.00

Each gun packed in a pasteboard carton, one half gross in a case

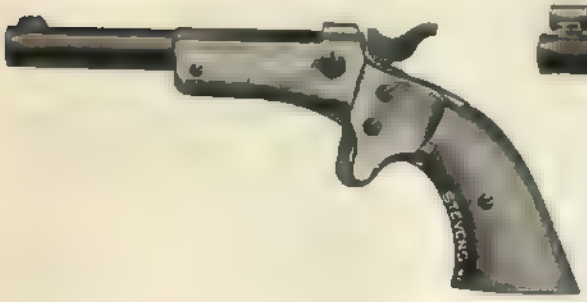
BOW AND ARROW

Sioux Chief. The bow is made of polished nickeled steel 26 in. long. The arrow is of polished hardwood with soft rubber tip 15 in. long, weight 8 ozs. It can be used indoors or out.....per dozen, $3.00

Three dozen in a case

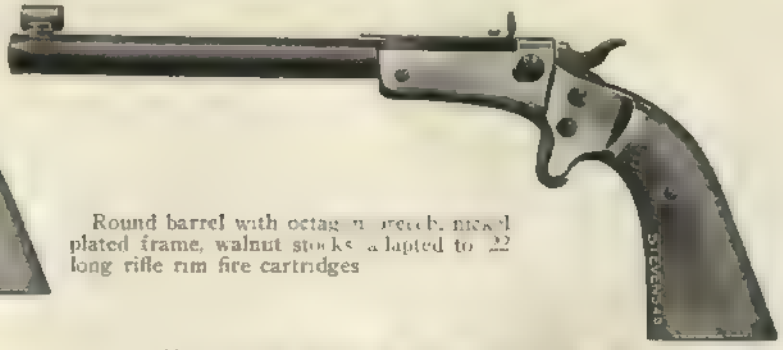
STEVENS' SINGLE SHOT PISTOLS

No. 41 TIP-UP MODEL



No. 41. Tip-up model, 6 in. round barrel with octagon breech, nickel plated frame, walnut stocks, open front sights, weight 8 ozs., adapted for .22 short rim fire cartridges, each $3 00

No. 43 DIAMOND MODEL



Round barrel with octagon breech, nickel plated frame, walnut stocks adapted to .22 long rifle rim fire cartridges

No. 1. 6 in. barrel, adjustable front and rear peep sights, weight 7 ozs., each $5.00
No. 2. 6 in. barrel, open sights, weight 9 ozs., each 5.00
No. 4. 10 in. barrel, globe front and rear peep sights, weight 12 ozs., each 7.50
No. 5. 10 in. barrel, open sights, weight 12 ozs., each 7.50

SAVAGE AUTOMATIC PISTOLS

.32 Caliber

The Savage Automatic Pistol is powerful, accurate and rapid firing arm. It is simple in action, has perfect balance and desirable weight. It is easily dismounted and assembled. The grip lies naturally in the hand.

Savage Automatic Pistol, .32 caliber rimless smokeless cartridge, capacity of magazine 10 shots, length over all 6½ in., weight 19 ozs., blued finish ..... each, $15.00

DERRINGERS

REMINGTON U. M. C.

Double Derringer two shots, .41 caliber short, rim fire, checkered rubber stock, weight 11 ozs., blued finish, each $6 25

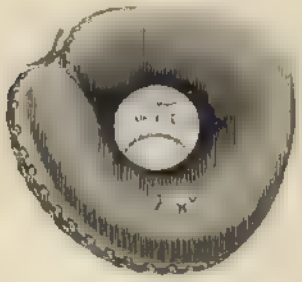
CATCHERS' MITTS

THE DRAPER-MAYNARD CO.

Nos. 612 and 615

No. 612. D. & M. Special. This Mitt is made of celebrated Indian tan buck which will not harden by wetting. Double sewed throughout with the best linen thread, padded with hand sewed and hand molded asbestos pad, which, with patent lacing between the thumb and hand, and patent of July 2, 1912, in the back, forms a deep pocket. This Mitt is also made with latest improved lacing device for adjusting the pad, also has latest improved welted palm and strip, forming a perfect molded palm. It is very soft and pliable and needs no breaking in, each $8.00

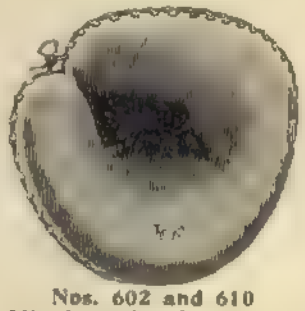
No. 615. This Mitt is manufactured of celebrated olive green horsehide, double sewed throughout, and padded with latest improved hand sewed and molded asbestos pad and has patent lacing between thumb and hand, also patent improvement in the back, forming a deep pocket, also laced back for adjusting the pad. The palm is welted to the strip forming a perfect molded palm, and is in every way a first class Mitt, each $7.50



Nos. 608 and 665

No. 608. Genuine Balboa horsehide used for the palm and genuine Benton tan leather for the back of this Mitt. It is cut on largest D. & M. professional Mitt pattern. It has latest improved asbestos pad, improved lacing device, also welted palm and strip forming a perfect molded palm. Has a deep pocket and cannot be surpassed at the price, each $5.00

No. 665. Has genuine black horsehide palm. Yearling leather back, the black and fingers are strongly sewed throughout and have a natural appearance. Palm and strip are welted together, making a molded palm. Has latest improved laced back, also the improvements in the pocket like the professional Mitts each 3.00



Nos. 602 and 610

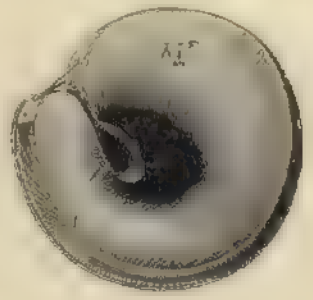
No. 602. This Mitt is made of genuine pearl horsehide, double sewed throughout and well padded. The palm and strip are welted together, forming a molded palm. It has patent lacing between thumb and hand and has extra rows of lacing back for adjusting pad, also patent of July 2, 1912, forming a deep pocket, each $4.00

No. 610. Extra large size, manufactured of Oxford gray colored Napa goat for palm, back and fingers. Palm and strip are welted together, making a molded face. Has patent laced thumb and improved laced back for adjusting the pad, and a deep pocket each 2.00

Nos. 613 and 603

No. 613. Extra large size, manufactured of the celebrated California Napa tan leather, which will not harden from wetting. Has latest improved lace back, patent lacing between thumb and hand, reinforced seams and a large, deep pocket, each $1.50

No. 603. Manufactured of California Napa tan leather throughout. Has latest improved lace back, patent laced thumb and a deep pocket. It is well padded and substantially made, each ..... .70



Nos. 113 and 58X

No. 113. Extra large size, made of celebrated California Napa tan leather the same in every way as 613, but without the laced back, each $1.30

No. 58X. Youths' Catchers' Mitt made of extra strong Napa tan leather palm and fingers, heavy brown duck back bound around the outside has patent laced thumb and deep pocket, each ..... .34

BASEMEN'S MITTS

THE DRAPER-MAYNARD CO.

Nos. 648 to 650

Nos. 641 to 644

No. 648. Made of the finest quality Cordovan [illegible] large size. Leather lined throughout and leather faced all around. Padded with superfine felt combining asbestos and with special [illegible] at the heel as is very flexible. Has patent lacing between the thumb and hand, a deep pocket and [illegible]. Strap and buckle fastening at the wrist ..... each, $5 00

No. 646. Made of the finest quality olive green horsehide, large size, is leather lined throughout and faced around the outside with leather lacing. It is padded with the best asbestos felting and has patent lacing between the thumb and hand. Cut on new improved patterns, is very flexible and has an extra deep pocket. Strap and buckle fastening at wrist ..... each, 4.00

No. 650. Made of genuine pearl colored horsehide palm [illegible] tan leather back and is extra large size. It is leather faced around the outside and has patent lacing between the thumb and hand forming a deep pocket. This Mitt is very flexible and has all the requirements of a first class Basemen's Mitt. Strap and buckle fastening at wrist ..... each, 3.50

No. 641. Made of fine quality pearl colored cowhide palm [illegible] tan leather back and fingers padded with the best asbestos felt, molded to fit the hand and form a deep pocket. Faced around the outside, patent lacing between the thumb and hand. Strap and buckle fastening at the wrist..... each, 2.00

No. 687. Made of fine black horsehide palm and black Cordovan leather back, laced around the outside, well padded. Has patent lacing between the thumb and hand and a deep pocket. Strap and buckle at the wrist ..... each 1 50

No. 644. Made of drab colored horsehide leather for palm and olive green leather for back. It is laced around the outside, has patent lacing at thumb is well padded and has a good pocket. Strap and buckle at the wrist ..... each 1 50

No. 643X

No. 643X. Made of fine pearl colored horsehide palm and tan in tan leather back and fingers. It is laced around the outside, has patent lacing between the thumb and hand and is padded with the best asbestos felt. Strap and buckle fastening at the wrist, each $2 00

No. 38

No. 38. Youths' Mitt, [illegible] tan leather, web in thumb and well padded, each..... $0.6[illegible]

DUK-FUT GLOVES

No. D75B. Youth size, Black California Napa, [illegible] hump in heel forming deep pocket. Full [illegible] lined with leather palm, leatherette bound..... each $0 75

No. D75G. Green California Napa, otherwise same as No. D75B ..... each 75

No. D100B. Black California Napa, champion model, full felt lined and leather palm, invisible hump in heel, leatherette bound ..... each, 1 [illegible]

No. D100T. Tan California Napa leather, otherwise same as No. D100B ..... each 1 00

No. D150B. Black kid leather, college model, felt padded, invisible hump in heel, full leather lined, leather bound ..... each 1 50

No. D150G. Green kid leather, otherwise same as No. D150B..... each 1 50

No. D200B. Black calf tannage, league model, asbestos felt padding, hand stitched and formed invisible hump, full leather lined, welted seams, leather bound..... each 2 00

No. D200T. Tan calf tannage, otherwise same as No. D200B ..... each 2 00

No. D250P. Pearl calf skin, "Semi-pro" model, as used by [illegible] tan stitched and reinforced invisible hump in heel, leather lined welted seams, leather bound. ..... each, 2 50

No. D300T. Brown calfskin, regulation model, otherwise made same as No. D250P ..... each 3 00

FIELDERS' GLOVES

THE DRAPER-MAYNARD CO.

Nos. 24X and 426

Nos. 13 and 14X

Nos. 11X and 12X

No. 5X

No. 24X. D. & M. Special. Made from the best quality drab colored horsehide leather, welted seams, sewed with best linen thread waxed. Lightly padded at the back and side of the hand with best asbestos felt, and felt welt between thumb and forefinger, especially for players that like a lightly padded glove. Requires no breaking in, each $4.50

No. 426. Made of the choicest Indian tanned horsehide, leather lined throughout and with web between thumb and forefinger. It has an extra large little finger and is well padded around edges and little finger with the best asbestos padding. The seams are welted and sewed with the best linen thread, waxed, each 3.25

No. 13. Made of good quality drab colored horsehide, leather lined throughout and has a web between thumb and forefinger. The seams are welted and sewed with the best linen thread, waxed. It has a large little finger and is well padded at the heel and around edges, making a deep pocket, each..... 2.25

No. 14X. Made of the finest quality cream colored Nat. tan leather, kid lined throughout and with web between thumb and forefinger. It is well padded at the heel and around edges up into the little finger, making a deep pocket. The seams are welted and sewed with the best linen thread, waxed, each.. $2.00

No. 11X. Made from best quality brown Napa leather, kid lined throughout and with web between thumb and forefinger. The seams are welted and sewed with waxed thread. It is well padded at heel and edges and has a good, deep pocket, each.. 1.30

No. 12X. Made from brown Napa leather, with web thumb and leather lined. It is strongly sewed, is well padded and has good pocket, each 1.70

No. 5X. Boys' Fielders' Glove, made of chrome tan leather, large size, and with web thumb, leather lined, well padded and strongly made, each 0.35

D. & M. SOFNER

D. & M. Sofner. The best preparation on the market for preserving and softening gloves and mitts. Put up in tubes or tin boxes, per dozen $1.50

Guaranteed not to injure the leather, but to keep any kind of leather used in gloves and mitts soft and pliable

BASEBALL MASKS

THE DRAPER-MAYNARD CO.

No. A

No. D

No. E

Nos. G and I

No. A. Made of the finest Bessemer steel wire extra heavy electro welded, fitted with back neck protecting pad, affording absolute protection to the neck padded with full length calfskin side pads, hair filled and thoroughly fastened, overhead elastic strap and leather forehead and chin straps, each.....$3.75

No. D. This Mask is made of electro welded steel wire and is nicely padded with kid leather, hair stuffed pads, and has head and chin pieces. The pads are thoroughly wired to the Mask like the best grades and is a very good Mask for amateurs, full size, each 1.75

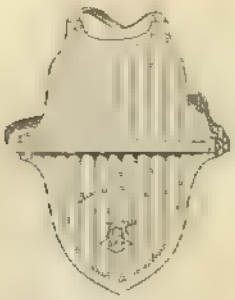
No. E. This Mask is made of electro blued steel wire, padded the same as our D Mask, only a trifle lighter wire. It is well made, full size and a very good Mask for light work, each $1.65

No. G. Boys' Mask made of extra heavy electro welded steel wire, side pads, strong and durable and well 1.15

No. I. Boys' Mask, electro blued wire and has side pads, each 0.35

BODY PROTECTORS

D. & M.



Nos. 10A to 10B

No. 10A. D. & M. Amateur Protector. Made of good material and similar to our League, trifle lighter in weight, but very serviceable and strong, each . $6 50

No. 10C. Men's Inflated Body Protector, same style as 10A. Good weight and very serviceable, each.... 6.00

No. 10B. D. & M. Boys' Inflated Protector. Made of good material, very serviceable and strong, each.... 4.00

UMPIRE INDICATORS

D. & M. Umpire Indicator. Made of celluloid, shaped to fit the hand. Endorsed by all umpires, each.....$0 65

HEEL AND TOE PLATES

D. & M. HEEL PLATES

No. 3. Good quality steel Heel Plate. Each pair furnished with screws, per dozen pairs.....$1 50

D. & M. TOE PLATES

No. 3. Good quality steel Toe Plate. Each pair furnished with screws, per dozen pairs.....$1 50

D. & M. PITCHERS' TOE PLATES

No. 1. Pitchers' Toe Plates. Fine quality aluminum Toe Plate, right or left, per dozen.....$4.50

BASKET BALLS

THE DRAPER-MAYNARD CO.

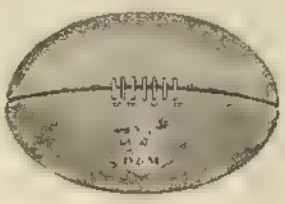
No. 7A. Made of finest quality imported English pebbled grain leather, extra heavy, is from 30 in. to 31 in. in circumference. Made on special D. & M. pattern, put in separate boxes and sealed. Extra heavy pure gum bladder, inflater and lacing needle with each Ball..... $9 00

No. 7AK. Made of cowhide, regulation size and weight, pure gum bladder, put up in separate boxes, lacing needle with each Ball 4.00

No. 7AE. Made of extra heavy pebbled leather, regulation size, pure gum bladder. A good practice Ball..... 3.00

FOOTBALLS

THE DRAPER-MAYNARD CO.



No. 5RG. Made from the best American oak tanned grain leather, a trifle heavier in weight than 5RK, regulation size, packed in separate box, with pure gum bladder, rawhide lace and lacing needle $3 50

No. 5RK. Made of cowhide leather, regulation size, put up one in a box with pure gum bladder, rawhide lace and lacing needle 2.50

No. 5REX. Made of extra heavy pebbled grain leather, regulation size, and closely resembles the finest balls. Put up one in a box with pure gum bladder, rawhide lace and lacing needle 2 00

No. 5RF. Made of pebbled grain leather, regulation size 1 50

No. 3RF. Made of pebbled grain leather 1 35

Guaranteed Pure Gum Bladders furnished with all above Balls

GENTLEMEN'S FINE BLACK SILK UMBRELLAS AND CANES

All Come with Patent Detachable Handles. Simple and Reliable. Fitted with Steel Rods, Silk Cases, Tassels and Cords and Tape Edge. Quality Guaranteed. PRICES EACH.

ILLUSTRATIONS ARE ONE HALF SIZE

FINE CAPE HORN HANDLE.

Gold filled, chased cap and bands.

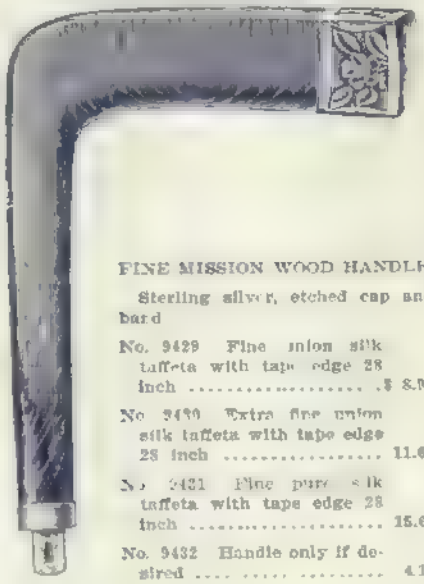
No. 9424 Fine union silk taffeta with tape edge 28 inch ..... $ 8.90

No. 9425 Extra fine union silk taffeta with tape edge 28 inch 11.60

No. 9426 Fine pure silk taffeta with tape edge 28 inch 15.65

No. 9427 Cane to match .. 5.35

No. 9428 Handle only, if desired 4.10



FINE MISSION WOOD HANDLE.

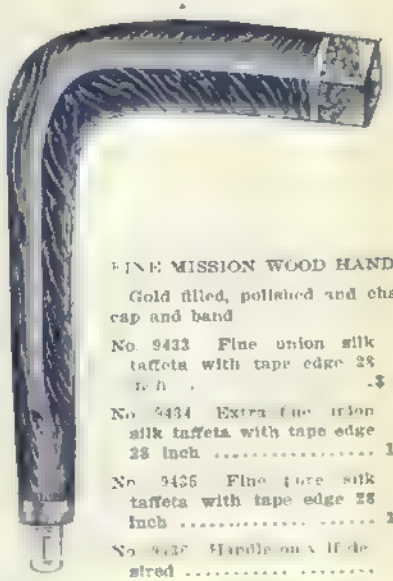
Sterling silver, etched cap and band

No. 9429 Fine union silk taffeta with tape edge 28 inch ..... $ 8.90

No. 9430 Extra fine union silk taffeta with tape edge 28 inch 11.60

No. 9431 Fine pure silk taffeta with tape edge 28 inch 15.65

No. 9432 Handle only if desired 4.10



FINE MISSION WOOD HANDLE.

Gold filled, polished and chased cap and band

No. 9433 Fine union silk taffeta with tape edge 28 inch ..... $ 8.90

No. 9434 Extra fine union silk taffeta with tape edge 28 inch 11.60

No. 9435 Fine pure silk taffeta with tape edge 28 inch 15.65

No. 9436 Handle only if desired 4.10

FINE MISSION WOOD HANDLE.

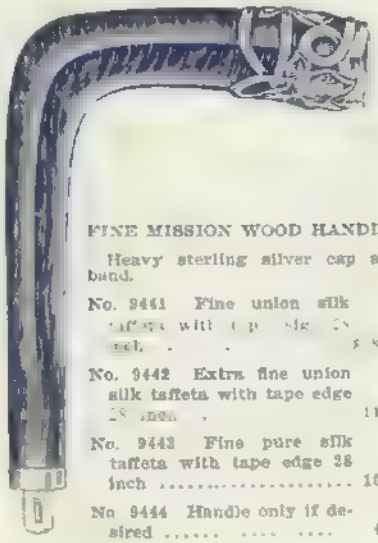
Heavy sterling silver cap and band.

No. 9437 Fine union silk taffeta with tape edge 28 inch ..... $ 8.90

No. 9438 Extra fine union silk taffeta with tape edge 28 inch 11.60

No. 9439 Fine pure silk taffeta with tape edge 28 inch 15.65

No. 9440 Handle only if desired 4.10



FINE MISSION WOOD HANDLE.

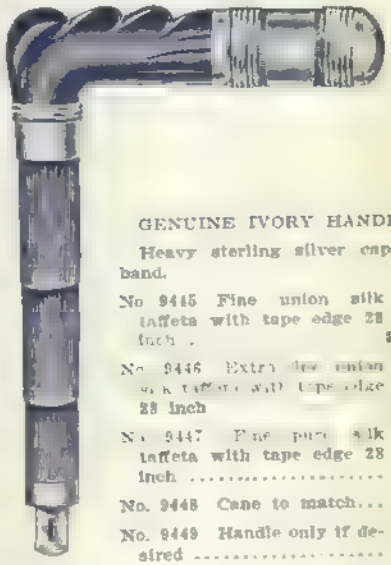
Heavy sterling silver cap and band.

No. 9441 Fine union silk taffeta with tape edge 28 inch ..... $ 8.90

No. 9442 Extra fine union silk taffeta with tape edge 28 inch 11.60

No. 9443 Fine pure silk taffeta with tape edge 28 inch 15.65

No. 9444 Handle only if desired 4.10



GENUINE IVORY HANDLE.

Heavy sterling silver cap and band.

No. 9445 Fine union silk taffeta with tape edge 28 inch $10.70

No. 9446 Extra fine union silk taffeta with tape edge 28 inch 13.35

No. 9447 Fine pure silk taffeta with tape edge 28 inch 17.45

No. 9448 Cane to match... 5.90

No. 9449 Handle only if desired 5.90

FINE CAPE HORN HANDLE.

Heavy sterling silver etched cap and bands

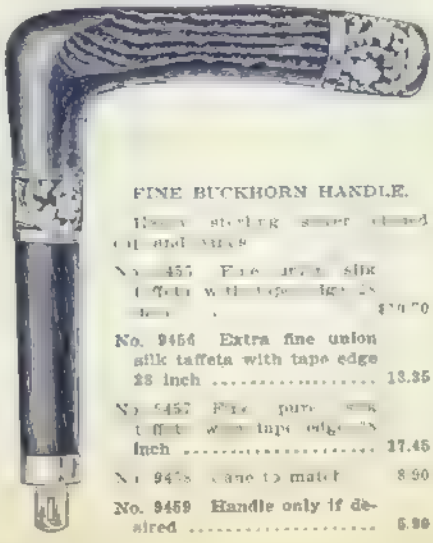
No. 9450 Fine pure silk taffeta with tape edge 28 inch $10.70

No. 9451 Extra fine union silk taffeta with tape edge 28 inch 13.35

No. 9452 Fine pure silk taffeta with tape edge 28 inch 17.45

No. 9453 Cane to match 8.90

No. 9454 Handle only if desired 5.90



FINE BUCKHORN HANDLE.

Heavy sterling silver chased cap and bands

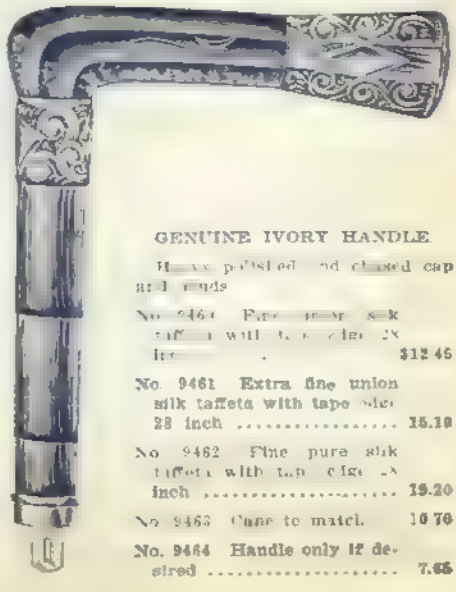
No. 9455 Fine pure silk taffeta with tape edge 28 inch $10.70

No. 9456 Extra fine union silk taffeta with tape edge 28 inch 13.35

No. 9457 Fine pure silk taffeta with tape edge 28 inch 17.45

No. 9458 Cane to match 8.90

No. 9459 Handle only if desired 5.90



GENUINE IVORY HANDLE.

Heavy polished and chased cap and ends

No. 9460 Fine pure silk taffeta with tape edge 28 inch $12.45

No. 9461 Extra fine union silk taffeta with tape edge 28 inch 15.10

No. 9462 Fine pure silk taffeta with tape edge 28 inch 19.20

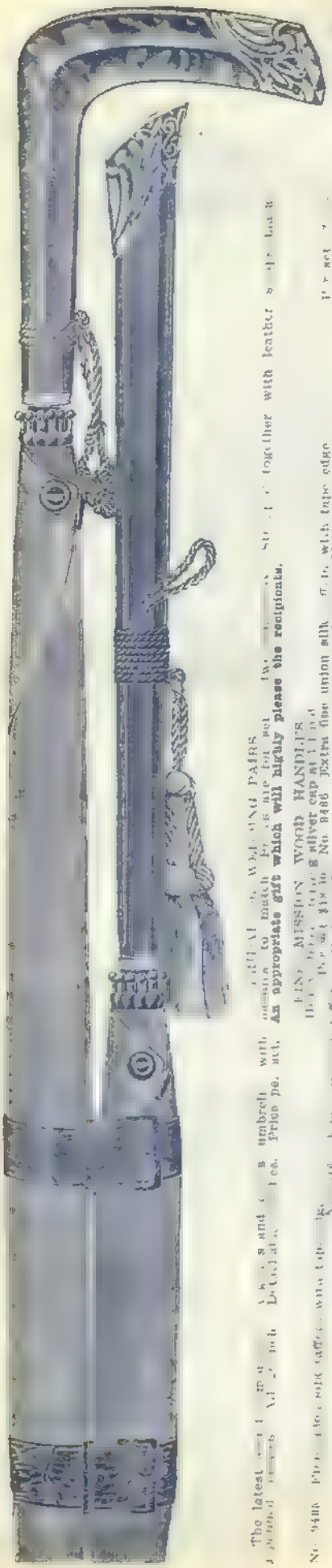
No. 9463 Cane to match. 10.70

No. 9464 Handle only if desired 7.65

Gentlemen's Fine Black Silk Umbrellas and Canes

All come with Patent Detachable Handles. Simple and Reliable. Fitted with Steel Rods, Silk Cases, Tassels, Cords and Tape Edges. Quality Guaranteed. PRICES EACH.

Illustrations of handles are one-half size.



NE BUCKHORN HANDLE

Heavy sterling silver ornamented cap and bands

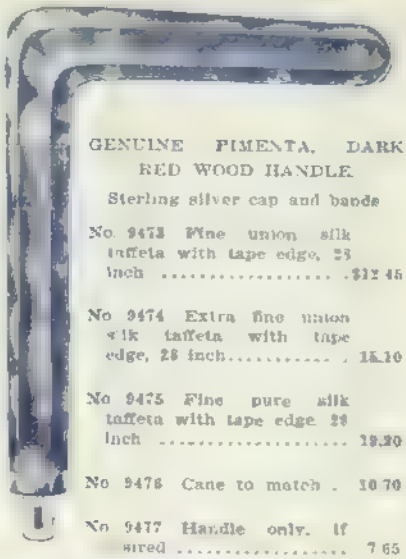
No. 9468 Fine union silk taffeta with tape edge, 28 inch $12 45

No. 9469 Extra fine union silk taffeta with tape edge, 28 inch 13 10

No. 9470 Fine pure silk taffeta with tape edge, 28 inch 19.20

No. 9471 Cane to match... 10.70

No. 9472 Handle only, if desired 7 65



GENUINE PIMENTA, DARK RED WOOD HANDLE.

Sterling silver cap and bands

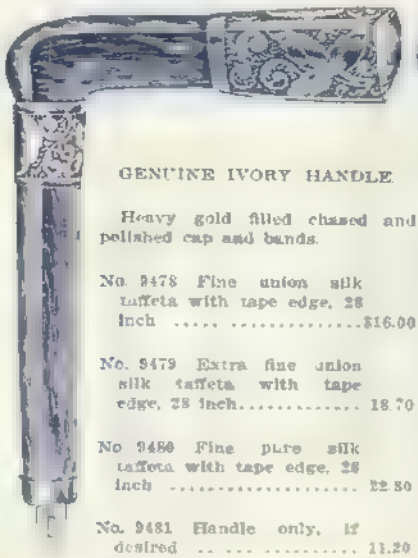
No. 9473 Fine union silk taffeta with tape edge, 28 inch $12 45

No. 9474 Extra fine union silk taffeta with tape edge, 28 inch..... 15.10

No. 9475 Fine pure silk taffeta with tape edge, 28 inch 19.20

No. 9476 Cane to match . 10 70

No. 9477 Handle only, if sired 7 65



GENUINE IVORY HANDLE.

Heavy gold filled chased and polished cap and bands.

No. 9478 Fine union silk taffeta with tape edge, 28 inch $16.00

No. 9479 Extra fine union silk taffeta with tape edge, 28 inch..... 18.70

No. 9480 Fine pure silk taffeta with tape edge, 28 inch 22.80

No. 9481 Handle only, if desired 11.20

HEAVY GOLD FILLED HANDLE.

Polished and chased.

No. 9482 Fine union silk taffeta with tape edge, 28 inch $16 00

No. 9483 Extra fine union silk taffeta with tape edge 28 inch 18.70

No. 9484 Fine pure silk taffeta with tape edge, 28 inch 23.80

No. 9485 Cane to match, ebony stick 14.25

No. 9486 Handle only, if desired 11 20

FINE BUCKHORN HANDLE.

Sterling silver ornamented ...

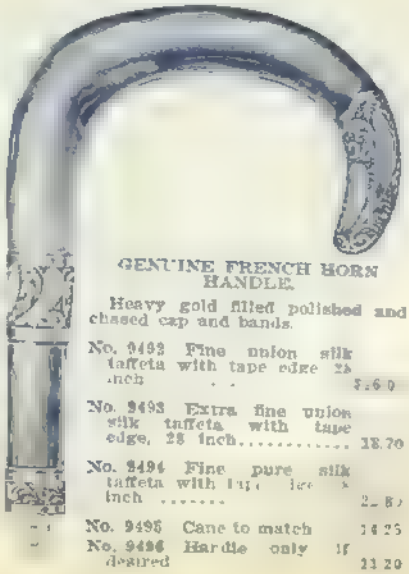
No. 9487 Fine union silk taffeta with tape edge, 28 inch $16.00

No. 9488 Extra fine union silk taffeta with tape edge, 28 inch..... 18.70

No. 9489 Fine pure silk taffeta with tape edge, 28 inch 22 80

No. 9490 Cane to match .. 14 25

No. 9491 Handle only, if desired 11 20



GENUINE FRENCH HORN HANDLE.

Heavy gold filled polished and chased cap and bands.

No. 9492 Fine union silk taffeta with tape edge 28 inch $16.00

No. 9493 Extra fine union silk taffeta with tape edge, 28 inch..... 18.70

No. 9494 Fine pure silk taffeta with tape edge 28 inch 22.80

No. 9495 Cane to match 14 25

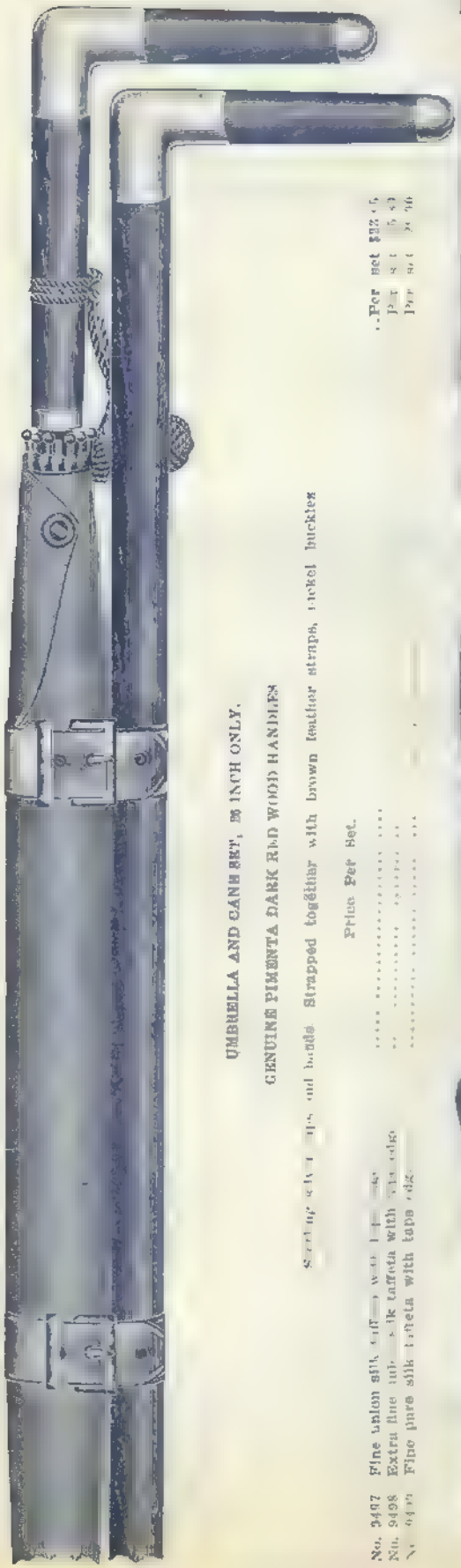
No. 9496 Handle only if desired 11 20

Gentlemen's Fine Black Silk Umbrellas and Canes

All Come With Patent Detachable Handles. Simple and Reliable Fitted with Steel Rods, Silk Cases, Tassels and Cords and Tape Edge.

Illustrations of Handles are One-Half Size

Quality Guaranteed. Prices Each



UMBRELLA AND CANE SET, 36 INCH ONLY.

GENUINE PIMENTA DARK RED WOOD HANDLES

Sterling silver caps and bands Strapped together with brown leather straps, nickel buckles

Price Per Set.

No. 9497 Fine union silk, taffeta with tape edge ..... Per set $22.50

No. 9498 Extra fine union silk taffeta with tape edge ..... Per set 25.00

No. 9499 Fine pure silk taffeta with tape edge ..... Per set 30.00

HEAVY POLISHED STERLING SILVER HANDLE.

No. 9500 Fine union silk taffeta with tape edge, 28 inch $19.60

No. 9501 Extra fine union silk taffeta with tape edge, 28 inch 22.25

No. 9502 Fine pure silk taffeta with tape edge, 28 inch 26.30

No. 9503 Handle only, if desired 14.80

GENUINE IVORY HANDLE.

Heavy sterling silver ornaments, cap and bands

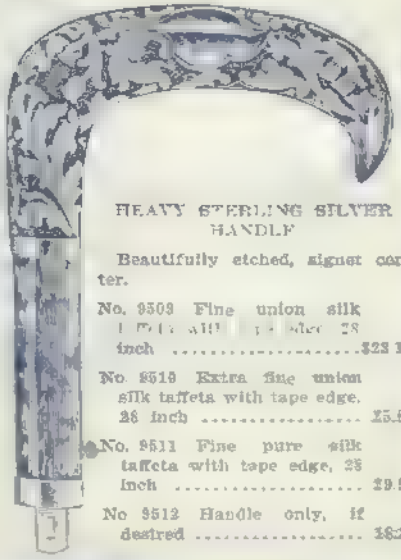
No. 9504 Fine union silk taffeta with tape edge, 28 inch $19.60

No. 9505 Extra fine union silk taffeta with tape edge, 28 inch 22.25

No. 9506 Fine pure silk taffeta with tape edge, 28 inch 26.30

No. 9507 Cane to match 17.80

No. 9508 Handle only, if desired 14.80



HEAVY STERLING SILVER HANDLE

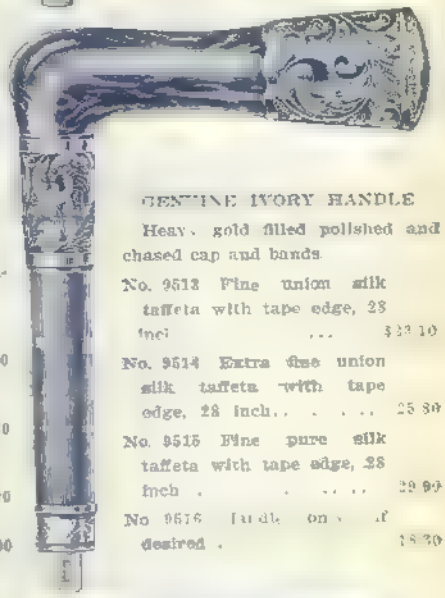
Beautifully etched, signet center.

No. 9509 Fine union silk taffeta with tape edge, 28 inch $23.10

No. 9510 Extra fine union silk taffeta with tape edge, 28 inch 25.80

No. 9511 Fine pure silk taffeta with tape edge, 28 inch 29.90

No. 9512 Handle only, if desired 16.30



GENUINE IVORY HANDLE

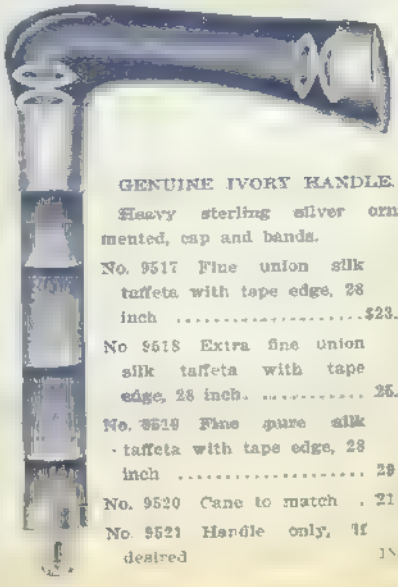
Heavy gold filled polished and chased cap and bands

No. 9513 Fine union silk taffeta with tape edge, 28 inch $23.10

No. 9514 Extra fine union silk taffeta with tape edge, 28 inch 25.80

No. 9515 Fine pure silk taffeta with tape edge, 28 inch 29.90

No. 9516 Handle only, if desired 16.30



GENUINE IVORY HANDLE.

Heavy sterling silver ornamented, cap and bands.

No. 9517 Fine union silk taffeta with tape edge, 28 inch $23.10

No. 9518 Extra fine union silk taffeta with tape edge, 28 inch. 25.80

No. 9519 Fine pure silk taffeta with tape edge, 28 inch 29.90

No. 9520 Cane to match 21.35

No. 9521 Handle only, if desired 13.30

HEAVY STERLING SILVER HANDLE

Beautifully etched.

No. 9522 Fine union silk taffeta with tape edge, 28 inch $23.10

No. 9523 Extra fine union silk taffeta with tape edge, inch 25.80

No. 9524 Fine pure silk taffeta with tape edge, 28 inch 29.90

No. 9525 Handle only, if desired 18.30

LADIES' FINE BLACK SILK UMBRELLAS

All come with patent detachable handles—simple and reliable. Fitted with steel rods, silk cases, tassels, cords and tape edges. Quality guaranteed. Illustrations are one-half size. PRICES EACH.

Note bottom of last umbrella page wherein we quote and illustrate fancy umbrella box.

FINE MISSION WOOD HANDLE, STERLING SILVER CAP AND BAND. LENGTH OF HANDLE 1 ½ INCHES

No. 9526	Fine union silk taffeta with tape edge 26 inch	Each	$ 6.80
No. 9527	Extra fine union silk taffeta with tape edge 26 inch	Each	8.90
No. 9528	Fine pure silk taffeta with tape edge 26 inch	Each	13.00
No. 9529	Handle only, if desired	Each	2.30

FINE MISSION WOOD HANDLE, STERLING SILVER BAND AND ETCHED CAP. LENGTH OF HANDLE 12¼ INCHES

No. 9530	Fine union silk taffeta with tape edge 26 inch	Each	$ 6.80
No. 9531	Extra fine union silk taffeta with tape edge 26 inch	Each	8.90
No. 9532	Fine pure silk taffeta with tape edge 26 inch	Each	13.00
No. 9533	Handle only, if desired	Each	2.30

FINE PARTRIDGE WOOD HANDLE, STERLING SILVER BAND AND EMBOSSED CAP, 1¼-INCH PEARL POST. LENGTH OF HANDLE 10 INCHES.

No. 9534	Fine union silk taffeta with tape edge 26 inch	Each	$ 6.80
No. 9535	Extra fine union silk taffeta with tape edge 26 inch	Each	8.90
No. 9536	Fine pure silk taffeta with tape edge 26 inch	Each	13.00
No. 9537	Handle only, if desired	Each	2.30

GENUINE PIMENTA DARK RED WOOD HANDLE, HEAVY STERLING SILVER CAP AND BAND. LENGTH OF HANDLE, 12 INCHES

No. 9538	Fine union silk taffeta with tape edge 26 inch	Each	$ 8.55
No. 9539	Extra fine union silk taffeta with tape edge 26 inch	Each	10.70
No. 9540	Fine pure silk taffeta with tape edge 26 inch	Each	14.80
No. 9541	Handle only, if desired	Each	4.10

FINE MISSION WOOD HANDLE, HEAVY STERLING SILVER ORNAMENTED CAP AND BAND, LENGTH OF HANDLE 12¼ INCHES

No. 9542	Fine union silk taffeta with tape edge 26 inch	Each	$ 8.55
No. 9543	Extra fine union silk taffeta with tape edge 26 inch	Each	10.70
No. 9544	Fine pure silk taffeta with tape edge 26 inch	Each	14.80
No. 9545	Handle only, if desired	Each	4.10

FINE MISSION WOOD HANDLE, STERLING SILVER BAND AND ETCHED CAP. LENGTH OF HANDLE, 11¼ INCHES.

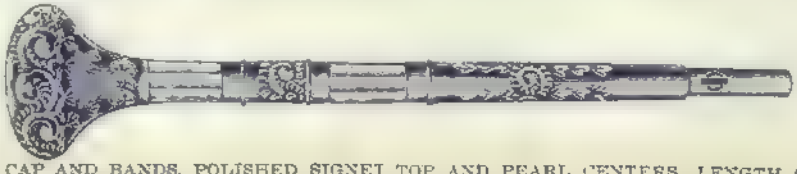
No. 9546	Fine union silk taffeta with tape edge 26 inch	Each	$ 8.55
No. 9547	Extra fine union silk taffeta with tape edge 26 inch	Each	10.70
No. 9548	Fine pure silk taffeta with tape edge 26 inch	Each	14.80
No. 9549	Handle only, if desired	Each	4.10

GENUINE PIMENTA DARK RED WOOD HANDLE, STERLING SILVER BAND AND ETCHED HEAVY CAP; LENGTH OF HANDLE 12 INCHES

No. 9550	Fine union silk taffeta with tape edge 26 inch	Each	$ 8.55
No. 9551	Extra fine union silk taffeta with tape edge 26 inch	Each	10.70
No. 9552	Fine pure silk taffeta with tape edge 26 inch	Each	14.80
No. 9553	Handle only, if desired	Each	4.10

FINE MISSION WOOD HANDLE, GOLD FILLED BAND AND HEAVY CHASED AND POLISHED CAP. LENGTH OF HANDLE, 12¼ INCHES

No. 9554	Fine union silk taffeta with tape edge 26 inch	Each	$ 8.55
No. 9555	Extra fine union silk taffeta with tape edge 26 inch	Each	10.70
No. 9556	Fine pure silk taffeta with tape edge 26 inch	Each	14.80
No. 9557	Handle only, if desired	Each	4.10



GOLD FILLED CHASED CAP AND BANDS, POLISHED SIGNET TOP AND PEARL CENTERS, LENGTH OF HANDLE 8 INCHES

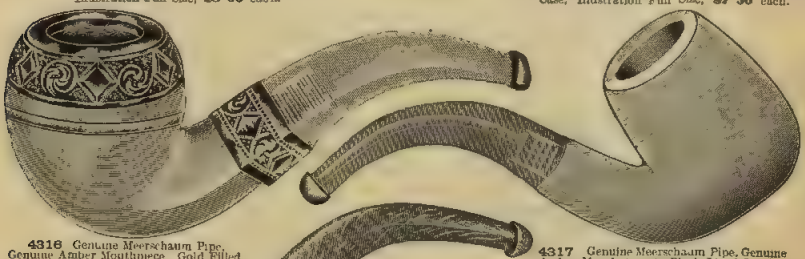
No. 9558	Fine union silk taffeta with tape edge 26 inch	Each	$ 8.55
No. 9559	Extra fine union silk taffeta with tape edge 26 inch	Each	10.70
No. 9560	Fine pure silk taffeta with tape edge 26 inch	Each	14.80
No. 9561	Handle only, if desired	Each	4.10

Genuine Meerschaum Pipes

Each Pipe Put Up in Fine Plush Lined Leather or Chamois Case.

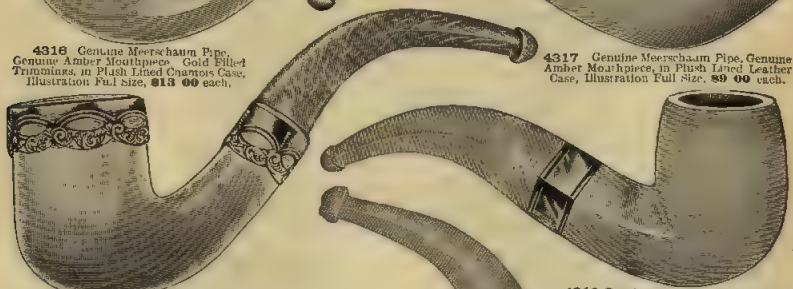
4314 Genuine Meerschaum Pipe, Genuine Amber Mouthpiece, Gold Gilled Trimmings, in Plush Lined Leather Case, Illustration Full Size, **$8 00** each.

4315 Genuine Meerschaum Pipe, Genuine Amber Mouthpiece, in Plush Lined Chamois Case, Illustration Full Size, **$7 50** each.



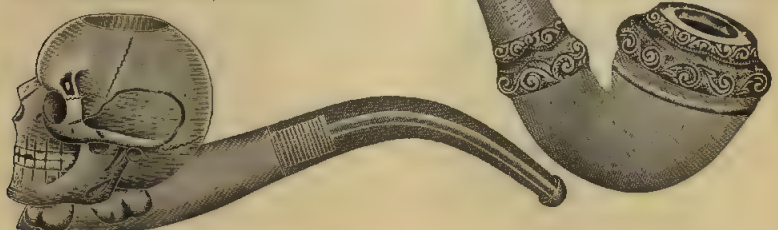
4316 Genuine Meerschaum Pipe, Genuine Amber Mouthpiece, Gold Filled Trimmings, in Plush Lined Chamois Case, Illustration Full Size, **$13 00** each.

4317 Genuine Meerschaum Pipe, Genuine Amber Mouthpiece, in Plush Lined Leather Case, Illustration Full Size, **$9 00** each.



4318 Genuine Meerschaum Pipe, Genuine Amber Mouthpiece, Gold Filled Trimmings, in Plush Lined Chamois Case, Illustration Full Size, **$11 50** each

4319 Genuine Meerschaum Pipe, Genuine Amber Mouthpiece, Gold Filled Trimmings, in Plush Lined Chamois Case, Illustration Full Size, **$7 50** each



4320 Genuine Meerschaum Pipe, Genuine Amber Mouthpiece, in Plush Lined Leather Case, Illustration Full Size, **$7 00** each.

4321 Extra Fine, Genuine Meerschaum Pipe, Genuine Amber Mouthpiece, in Plush Lined Leather Case, Illustration Three-fourth Size, **$22 00** each.

GASOLINE LIGHTING SYSTEMS

Permitted by All Insurance Underwriters

THE ARCOLIGHT SYSTEM

A Perfect Private Gas Plant

Shipped Complete in every detail, Ready to Set Up

For those who prefer a pipe system, there is nothing made which is the equal of the well-known "Arcolight System." Absolutely no-carbonizing, containing no asbestos wicking or other packing, made of the highest quality of brass and copper bronze, carefully tested and guaranteed, when the Directions are followed.

The Generator never contains over a teaspoonful of gasoline at any one time; it being immediately and constantly turned into the highest grade of illuminating gas, which is supplied to the lamps through galvanized rolled steel piping. Every piece of piping is screw fitted, there being no soldering, cutting or fitting to do

R-4-1200 C. P.

The Light given is 600 Candle Power per Mantle, whether Upright or Inverted, the cost of fuel per Hour for Upright Mantles is about Two-Fifths of a Cent; for the Inverted Mantles, about One-Quarter Cent

Send a diagram with your order marking parts where Lights are wanted, distance between each, and giving the height of your ceiling. System will be put up exactly as per your diagram and it fits as per your specifications. Every section of pipe comes numbered so there is never any difficulty in connecting the correct sections.

Outfit Complete, consists of Generator, 5 Gallon Steel Tank, Brass Pump, Galvanized Steel Piping, fitted with Brass Screw Couplings, One Elbow and All Connections, Wrench, Wax Tapers, Taper Holders, Globes, Mantles or Shades. Carefully packed and ready to Install.

Complete Systems, with Upright Mantles

	Each
No. 33A—(A) Two Light System, with Two Style R-1 Lamps and 35 ft. of Piping, 3 ft. Drop	**$50 00**

Above System Furnished with Style R-11 Lamps at Same Price

	Each
No. 33B—(B) Two Light System, with Two Style R-4 Lamps and 35 ft. of Piping, 2 ft. Drop	**$60 00**
No. 33C—(C) Three Light System, with 2 Style R-4 and One Style R-5 Outdoor Lamp and 55 ft. of Piping; 2 ft. Drop	**$80 00**

Above Systems furnished with either Style R-4, R-8, R-11, R-12, R-15 or R-26 at Same Prices

If Extra Drop is Wanted, add $0.25 Net per foot to above prices

If Ten Gallon Tank is wanted, add $3.00 Net to above prices

LAMPS ONLY

UPRIGHT MANTLE LAMPS

	Each
No. 33D—Style R-1, 3 ft. Drop	**$5 00**
No. 33E—Style R-4; 3 ft. Drop	**8 80**
No. 33FF—Style R-7; 3 ft. Drop	**6.66**

INVERTED MANTLE LAMPS

	Each
No. 33H—Style R-8; Indoor 2 ft. Drop	**$8 80**
No. 33K—Style R-26, Indoor Arc, 2 ft. Drop	**8 80**
No. 33L—Style R-11, Pendant, 2 ft. Drop	**5 50**
No. 33M—Style R-12, Fixture; 2 ft. Drop	**8 80**
No. 33N—Style R-15, Outdoor Arc (with Inverted Mantles), 2 ft. Drop	**11 11**

EXTRAS

	*Per Dozen
No. 33P—Globes, Clear for Style R-1 Lamps	**$6 00**
No. 33R—Globes, Clear for Style R-4	**16 00**
No. 33S—Globes, Clear for Style R-8 Lamps	**12 00**
No. 33T—Globes, Clear for Style R-26 or R-15	**14 00**
No. 33V—Globes, Half Frosted, for Style R-11 or R-12 and R-7 Lamps	**4.00**
No. 33W—Shades, for Style R-4 Lamps	**20 00**
No. 33X—Shades, for Style R-8 Lamps	**24 00**
No. 33XX—Shades, for Style R-7 Lamps	**30 00**
	Per Foot
No. 33CC—Extra Pipe (1½ or 2 in.)	**$0 14**

	Each
No. 33DD—Elbows, 1½ or 2 in.	**$0 33**
No. 33EE—Tees, 1½ or 2 in.	**.55**
No. 33FF—Crosses, 1½ or 2 in.	**1 00**
	Per Pair
No. 33HH—Couplings, 1½ in.	**$0 44**
No. 33KK—Couplings, 2 in.	**.66**

GENERATORS

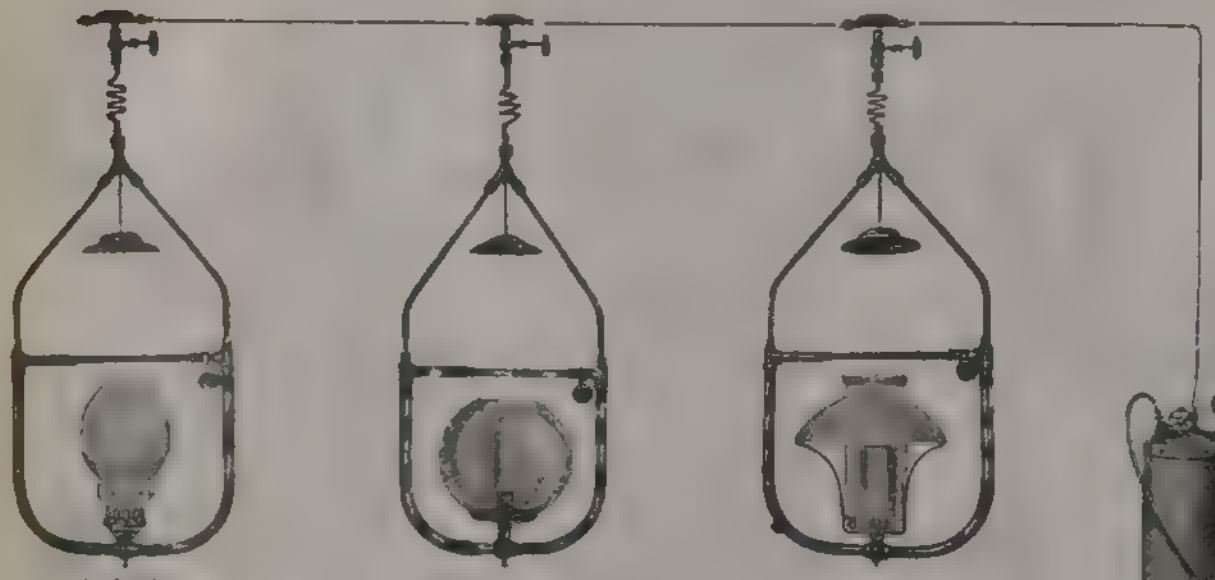
	Each
No. 33A2—(A) 1 to 6 Lights; 1 Riser	**$15 00**
No. 33B2—B 6 to 12 Lights, 1 Riser	**20 00**
No. 33C2—2 18 Lights, 1 Riser	**25 00**
No. 33D2—(D) 18 to 24 Lights; 2 Risers	**35 00**

Note—One Pair of Couplings is required for each 10 ft. length or less of Pipe, One Pair for Each Elbow, One and One-half Pair for each Tee and Two Pairs for each Cross.

All Prices F. O. B. Chicago, No Freight Allowed

GASOLINE HOLLOW WIRE LIGHTING SYSTEMS

Permitted by All Insurance Underwriters



Style "A"

Style "B" (Clear Globe)
Style "D" (White Globe)

Style "C"

Tank and Pump

YALE SPECIAL
UPRIGHT MANTLE LAMPS

This System embodies all Essential Points—Safety, Reliability, Perfect Construction, Light-giving Power and Economy of Operation. [illegible] 600 Candle Power per Lamp, Pure, Powerful and Perfectly White; the cost of operation is about ½ of a cent per Lamp per Hour.

We ship these systems complete. There is no cutting, fitting or soldering of any kind to do. If you have an irregularly shaped room and will send us a diagram, marking points where light is wanted, distance between floor and ceiling, the height of the ceiling, the System will be fitted exactly to your requirements, and shipped, Complete and Ready to Set Up.

Outfit consists of a Two Gallon Rolled Steel Tank, Pump Gauge, Connections and Wire Tubing, Complete

One Lamp with 3 ft. Drop and 25 ft. of Hollow Wire Tubing

		Each
No. 34A2	Style A, White Globe	$17 30
No. 34A3	Style B, Clear Globe	17 30
No. 34A4	Style D, White Globe	17 30
No. 34A5	Style C, White Shade	17 30

Two Lamps, with 3 ft. Drop and 50 ft. of Hollow Wire Tubing

		Each
No. 34B2	—Style A, Frosted Globe	$25 69
No. 34B3	—Style B, Clear Globe	25 69
No. 34B4	—Style D, Frosted Globe	25 69
No. 34B5	Style C, Frosted Shade	25 69

Three Lamps, with 3 ft. Drop and 75 ft. of Hollow Wire Tubing

		Each
No. 34C2	Style A, Frosted Globe	$34 12
No. 34C3	Style B, Clear Globe	34 12
No. 34C4	Style D, Frosted Globe	34 12
No. 34C5	Style C, Frosted Shade	34 12

LAMPS, ONLY

Complete with Globe, or Chimney, Bracket, Valve and Mantle; All with 3 ft. Drop

		Each
No. 34F2	—Style A	$6 66
No. 34F3	Style B	6 66
No. 34F4	Style C	6.66
No. 34F5	Style D	6.66

Four Lamps, with 3 ft. Drop and 100 ft. of Hollow Wire Tubing

		Each
No. 34D2	—Style A, White Globe	$42 53
No. 34D3	—Style B, Clear Globe	42 53
No. 34D4	—Style D, White Globe	42 53
No. 34D5	—Style C, White Shade	42 53

Five Lamps, with 3 ft. Drop and 125 ft. of Hollow Wire Tubing

		Each
No. 34E2	Style A, White Globe	$51 94
No. 34E3	Style B, Clear Globe	51 94
No. 34E4	Style D, White Globe	51 94
No. 34E5	Style C, White Shade	51 94

EXTRAS

		Per Dozen
No. 34H	—Globes, White, for Style A Lamps	$9 00
No. 34K	—Globes, Clear, for Style B Lamps	8 00
No. 34L	—Globes, White, for Style D Lamps	9 00
No. 34M	—Chimneys, Clear, for Style C Lamps	3 20
No. 34N	—Shades, White, for Style C Lamps	4 00

		Each
No. 34S	—Taper and Nut Connections, for Wire	$0 15
No. 34T	—Taper and Nut Connections, for Tank or Drops	.26

		Per Foot
No. 34V	—½ in. Seamless Brass Tubing	$0.07

Note—If 5 Gallon Tank is wanted add $1.35 Net to above Prices. If 10 Gallon Tank is wanted add $4.75 Net to above Prices.

Oxidized Tube Drop Supplied with above Lamps at 25c per Foot Net Extra.

All Prices F. O. B. Chicago, No Freight Allowed

GASOLINE HOLLOW WIRE LIGHTING SYSTEMS

Permitted by all Insurance Underwriters

STYLE "H"
Single Inverted 600 C. P.
Double Inverted 1200 C. P.

STYLE "M" OUTDOOR
1200 Candle Power
Inverted

STYLE "J"
Single Inverted 600 C. P.
Double Inverted 1200 C. P.

STYLE "S" 600 C. P.
Incandescent

YALE SPECIAL

INVERTED ARC LAMPS

Every System Guaranteed Two Years; Positively will not Clog or Freeze

These Lamps give a soft, brilliant light from 600 to 1200 candle power and are for use in stores, churches, halls and every place in need of a good, dependable light at a minimum cost. All Inverted Lamps equipped with cleaning [illegible] on outside of lamp. We guarantee two years and ship complete, all parts and connections numbered, ready to put up. No soldering, cutting or fitting to do.

All systems shipped complete and ready to set up, as per measurements. Be sure to give the height of your ceiling.

Tank and Pump

	Each
No. 35A2—(10) Outfit with One Style H Lamp with 2 ft. Drop; 35 ft. of Hollow Wire Tubing	$20 64
No. 35A3—(10) Outfit with one Style J Lamp with 2 ft. Drop, 25 ft. Hollow Wire Tubing	20 64
No. 35A4—(11) Outfit with Two Style H Lamps and 50 ft. of Hollow Wire Tubing	32 39
No. 35A5—(11) Outfit with Two Style J Lamps and 50 ft. of Hollow Wire Tubing	32 39
No. 35B2—(12) Outfit with Three Style H Lamps and 75 ft. of Hollow Wire Tubing	43 14
No. 35B3—(12) Outfit with Three Style J Lamps and 75 ft. of Hollow Wire Tubing	$43 14
No. 35B4—(13) Outfit with Four Style H Lamps and 100 ft. of Hollow Wire Tubing	55 19
No. 35B5—(13) Outfit with Four Style J Lamps and 100 ft. of Hollow Wire Tubing	55 19
No. 35B6—(14) Outfit with Five Style H Lamps and 125 ft. of Hollow Wire Tubing	67 94
No. 35B7—(14) Outfit with Five Style J Lamps and 125 ft. of Hollow Wire Tubing	67 94

Note—If 5 Gallon Tank is wanted add $1 35 Net to Above Prices. If 10 Gallon Tank is wanted add $4.65 Net to above Prices; if Extra Drop is wanted add 25 Cents Net per Foot to above Prices.

Tank and Pump

TANKS

	Each
No. 35C2—Tanks; Capacity 2 Gallons, with 20 in. Steel Pump	$8 89
No. 35C3—Tanks; Capacity 5 Gallons	11.11
No. 35C4—Tanks, Capacity 10 Gallons	16 67

PUMPS

	Each
No. 35D5—Samson; Brass, 1⅛x20 in. 4 in. Base	$2 78
No. 35D6—Junior; Steel Barrel 1¼x20 in.; Cast Base	1.22

EXTRAS

Seamless Wire Tubing, etc.

See Page 1573 for Prices on Nut Connections and Seamless Wire Tubing

	Each
No. 35D1—Lamps, Style S; 3 ft. Drop	$ 66
No. 35D2—Lamps, Style H, 2 ft. Drop	1 00
No. 35D3—Lamps, Style J; 2 ft. Drop	1 00
No. 35D4—Lamps, Style M, Outdoor; 2 ft. Drop	16.33
No. 35E2—Shades, for Style H Lamps	1.25
No. 35F2—Globes, Clear, for Styles J or M Lamps	1 25
No. 35H2—Globes, White, for Styles J or M	2 00
No. 35K2—Globes, Frosted, for Style S	1 30

All Prices F. O. B Chicago, No Freight Allowed

KEROSENE TORCHES

BRAZED STEEL TORCHES

Are found indispensable on Steam Shovels and Locomotives in Mining and Stripping, also adapted to Round Houses, Machine Shops, Foundries, Rolling Mills, Blast Furnaces and Docks.

Made of heavy Sheet Steel, Brazed with hard brass Spelter Solder which will not melt at a welding heat. Practically indestructible and guaranteed not to leak; Use Candle Wicking and Kerosene

ONE SPOUT

Per Dozen

No. 91—2 Quart, One Spout; Otherwise same as No. 93 ..... $17 00

Weight 19 Lbs. per Dozen

ONE SPOUT Per Dozen

No. 92—1 Quart, One Spout; Size 6x6 in., Will Burn about 8 Hours with One Filling; Heavy Steel, Brazed; Wrought Iron Top; Can be Carried in Hand, and will not fall over if set down. $12.00

Weight 15 Lbs. per Dozen

Open Stock

TWO SPOUT

Per Dozen

No. 93—2 Quart, Two Spout; Size 6x6½ in.; Will Burn about 9 Hours with One Filling; Heavy Steel Brazed, Wrought Iron Top; Hang by Hook on Nail, Tree Limb, Post, etc., Cover is Chained to Torch. .$18 00

Weight 21 Lbs. per Dozen

TIN TORCHES

The following Tin Torches are used mostly for Night Gangs on large Railroad and Bridge Construction, Road Making and Logging work; set on rough sticks at convenient points. For long jobs, where cheap first cost is not all important, we recommend the Brazed Steel Torches, shown above.

Hand Made in our own Shops, of Heavy Tin, with Can Screw Fillers and Spouts, 1 in. Tube for Candle Wicking, Use Kerosene or Torch Oil

1 SPOUT STATIONARY

Nos	81	82
Quarts	1	2
Size Can, In.	4x4¼	5x5⅜
Burns, Hours About.	8	16
Weight Dozen Lbs.	5½	8
Per Dozen	$3.60	4.20

1 SPOUT SWINGING

Nos	83	84
Quarts	1	2
Size Can, In.	4x4¼	5x5⅜
Burns, Hours, About	8	16
Weight Dozen, Lbs.	8	10
Per Dozen	$4.00	5.00

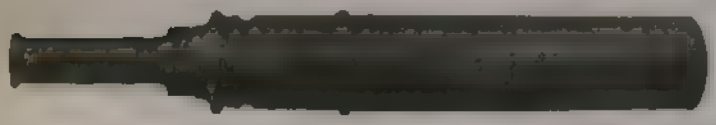
Open Stock

2 SPOUT SWINGING

Nos.	85	86
Quarts.	1	2
Size Can, In.	4x4¼	5x5⅜
Burns, Hours, About	4½	9
Weight Dozen, Lbs.	7½	10½
Per Dozen	$5.00	6.00

ENGINEER'S HAND TORCHES

Used on all Steam Vessels not using Electricity, on Locomotives and Around General Machinery, such as Engines, Pumps, Etc.



Per Dozen

No. 87—1 Pint, Malleable Iron, Size 13½x2 in., Small Tube at Top for Candle Wicking. Supplied with Bracket Holder. Light and Absolutely Outright, will Burn 5 Hours with One Filling $14 00

Weight 41 Lbs. per Dozen

Per Dozen

No. 88—2 Pint, IX Tin; Size 10x2¾ in., ⅝ in. Tube for Candle Wicking. Loose Bottom to allow to be set or End without Folding Over; Burns about 5 Hours with One Filling.....$12.00

Weight 15 Lbs. per Dozen

Per Dozen

No. 89—1 Pint, Oval IXX Tin, Two ¼ in. Tubes for Candle Wicking, Brass Screw Filler, Burns 7 to 8 Hours with One Filling, can be used with Wood Handle inserted in the Hollow Tin Socket if desired. a No. 1 Flat Wick Burner may be used instead of Round Candle Wick Socket. $10 00

Weight 3 Lbs. per Dozen

Open Stock

We will Make to Order any Kind, Size or Shape of Tin Torches

GAS FIXTURE FITTINGS

GAS BRACKETS

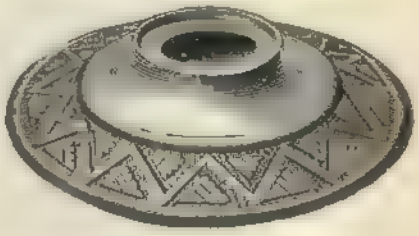
No. 320. 6 inch stiff rope bracket, each $
No. 320X. 8 inch stiff rope bracket, each
No. 321. 1 swing rope bracket, each
No. 322. 2 swing rope bracket, each
No. 323. 3 swing rope bracket, each

No. 420. 6 inch stiff square bracket, each $
No. 420X. 8 inch stiff square bracket, each
No. 421. 1 swing square bracket, each.
No. 422. 2 swing square bracket, each
No. 423. 3 swing square bracket, each

GAS BRACKETS

No. 180. 6 inch stiff rope bracket, each..... $
No. 180X. 8 inch stiff rope bracket, each..
No. 181. 1 swing rope bracket, each.....
No. 182. 2 swing rope bracket, each
No. 183. 3 swing rope bracket, each.

BRACKET BACKS



No. 20. 2½ inch stamped bracket back, per dozen $
No. 21. 3 inch stamped bracket back, per dozen
No. 22. 2½ inch spun bracket back, per dozen..
No. 23. 3 inch spun bracket back, per dozen.....

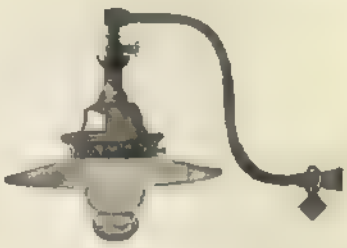
TUBES

No. 75. Plain tube

No. 8. Plain tube

No. 75. Stiff inverted, each $.....
No. 76. 1 swing inverted, each
No. 8. Stiff inverted, each.
No. 9. 1 swing inverted, each...

TUBES



No. 10. Square tube

No. 12. Rope tube

No. 10. Stiff inverted, each. $
No. 11. 1 swing inverted, each
No. 12. Stiff inverted, each.....
No. 13. 1 swing inverted, each .

CLUSTERS

No. 81. ⅜ inch cluster, each ..... $..

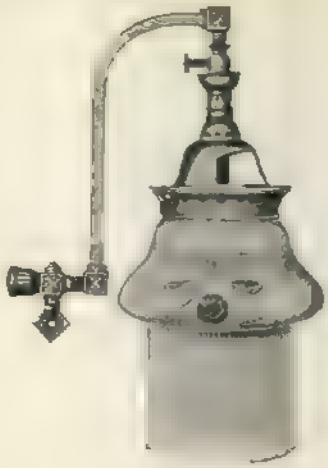
CLUSTERS

No. 82. ⅜ inch cluster, each..... $

GAS FIXTURE FITTINGS

TUBES

No. 19. Plain tube, each ... $



No. 18. Square tube, each ... $

BRACKETS

No. 55A. Combination bracket, each ... $

No. 56A. Combination bracket, each ... $

LIGHT FIXTURES

Spread 12 inches. Length 36 inches

No. 90A. 2 Light Fixture, each ... $
No. 91A. 3 Light Fixture, each
No. 93A. 4 Light Fixture, each

Spread 17 inches. Length 36 inches

All brass

No. 12A. 2 Light Fixture, each ... $
No. 13A. 3 Light Fixture, each
No. 14A. 4 Light Fixture, each

No. 91A

No. 12A

GAS LIGHT FIXTURES

No. 50A

No. 72A

No. 22A

No. 50A. Spread 15 inches, length 36 inches, each.... $.....

Spread 14½ inches. Length 36 inches

All brass

No. 72A. 2 Light, each $
No. 73A. 3 Light, each
No. 74A. 4 Light, each

Spread 17 inches. Length 36 inches

All brass

No. 22A. 2 Light, each.. $
No. 23A. 3 Light, each..
No. 24A. 4 Light, each

Spread 17 inches. Length 36 inches

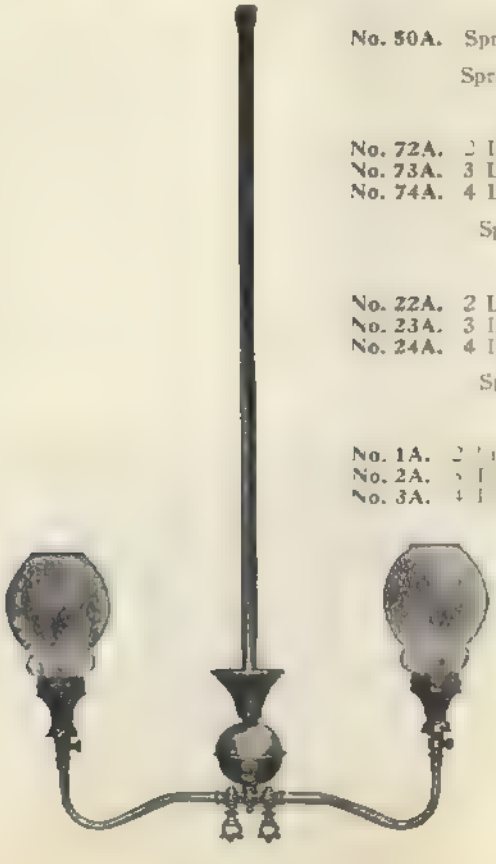
All brass

No. 1A. 2 Light, each $
No. 2A. 3 Light, each
No. 3A. 4 Light, each

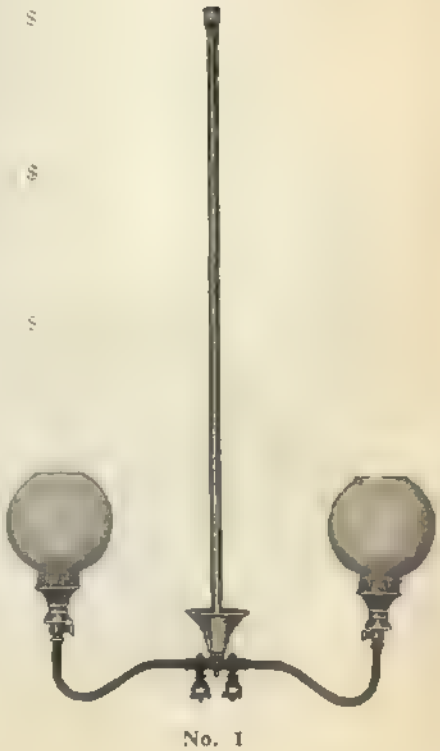
Spread 17½ inches

Length 36 inches

No. 1. 2 Light, each $
No. 2. 3 Light, each
No. 3. 4 Light, each



No. 1A



No. 1

GAS LIGHT FIXTURES

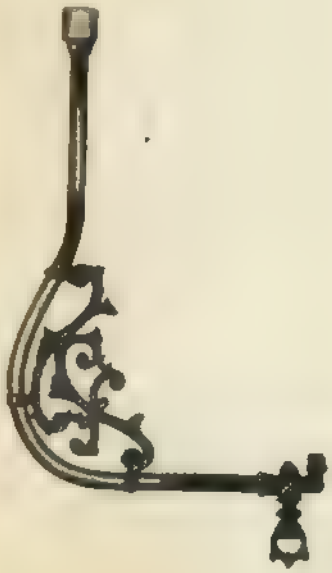
No. 70A. ¼ inch inverted pendant, each .....$.....

Spread 11 inches Length 36 inches
Arms can be turned up or down

No. 62. 2 Light vertical, each...$....
No. 63. 3 Light vertical, each... .....
No. 64. 4 Light vertical, each. . .....

No. 80. ¼ inch inverted pendant, each . .....$

Lever cock with chain pull 12 inches above the burner.



No. 36B

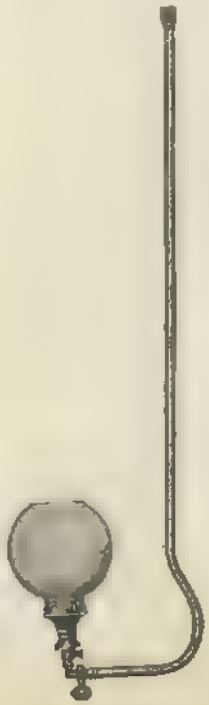
No. 30B. 30 inches long, each $
No. 32B. 32 inches long, each...
No. 36B. 36 inches long, each...

⅛ Ell Pendants

No. 30. 30 inches long, each $
No. 32. 32 inches long, each.. .
No. 36. 36 inches long, e.. .

¼ Ell Pendants

No. 30A. 30 inches long, each. $
No. 32A. 32 inches long, each. .
No. 36A. 36 inches long, each. .

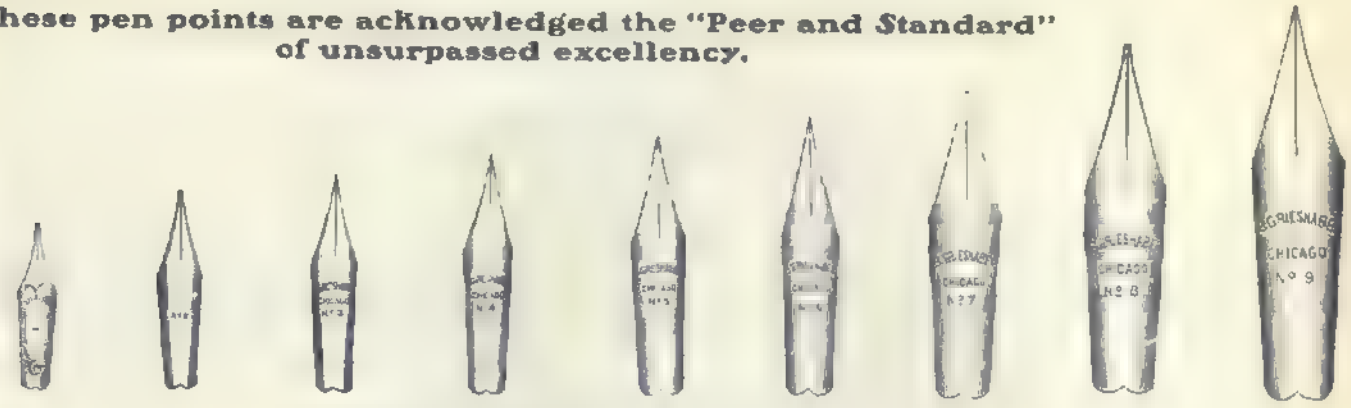


1¼ Ell Pendant

EXTRA QUALITY FINE SOLID GOLD PENS

QUALITY GUARANTEED. :: PRICES EACH.

These pen points are acknowledged the "Peer and Standard" of unsurpassed excellency.

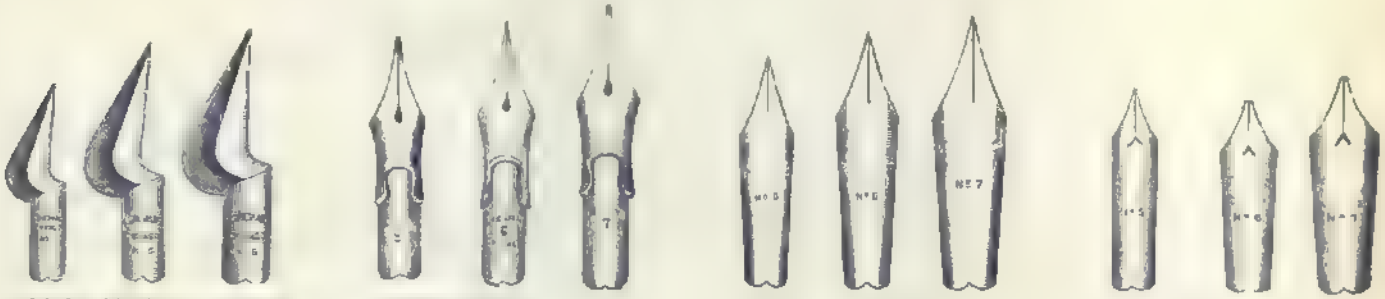


LONG NIB PENS—14 karat.

No. 1...$1.15 No. 2...$1.50 No. 3...$1.75 No. 4...$2.10 No. 5...$2.45 No. 6...$3.15 No. 7...$3.85 No. 8...$4.90 No. 9...$6.30

LONG NIB PENS 10 karat

No. 1...$0 95 No 2...$1.05 No. 3...$1.15 No. 4...$1.40 No. 5...$1.75 No. 6 . $2.10 No. 7. .$2 45



OBLIQUE PENS—14 karat only

No. 4 $3 50 | No. 5 $4 20 | No. 6 $4.90

FALCON PENS—14 karat only.

No. 5 $3.15 | No. 6 $3 85 | No. 7 $4 55

SHORT NIB PENS—14 karat

No. 5 $2.45 | No. 6 $3 15 | No. 7 $3 8[illegible]

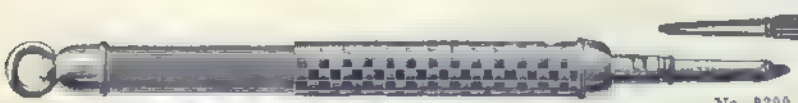
STUB PENS—14 karat only

No. 5 $2 45 | No. 6 $3 1[illegible] | No. 7 $3.85

FINE QUALITY TOOTHPICKS AND PENCILS

PRICES EACH.

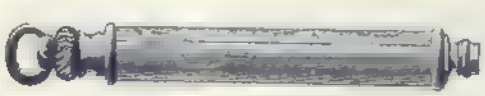
No. 9297 Solid sterling silver chased tablet pencil $2 35



No. 9298 Gold filled magic pencil, extra large size . . $2 80

No. 9299 Sterling silver half-chased screw ring pencil $1 40
No. 9300 Gold filled half-chased screw ring pencil 1 40

No. 9301 Gents gold filled magic pencil, extra large size $2 80



No. 9302 Extra large pearl magic pencil . . $3 40

No. 9303 Sterling swivel friction full-chased pencil $3 50
No. 9304 Same in gold filled full-chased pencil . . 3 50

No. 9305 Gold filled magic ring pick . . $1 75

No. 9306 Gold plated screw pick, solid gold point $0 70

No. 9307 Gold filled screw tooth and ear pick, solid gold points $1 75

No. 9308 Solid 10 karat stone head pick, gold filled barrel $2.80

Fine Solid Gold Pens with Assorted Desk Holders

PRICES EACH.

GOLD PENS IN SEAMLESS GOLD FILLED PEARL DESK HOLDERS

		No. 1 Pen.	No. 2 Pen.	No. 3 Pen.	No. 4 Pen.	No. 5 Pen.	No. 6 Pen.
No. 9309	14k Pens and Holders	$	$	$	$	$4.[illegible]	$
No. 9310	10k Pens and Holders					3	3.50

GOLD PENS IN SEAMLESS GOLD FILLED RUSTIC PEARL DESK HOLDERS

		No. 1 Pen.	No. 2 Pen.	No. 3 Pen.	No. 4 Pen.	No. 5 Pen.	No. 6 Pen.
No. 9311	14k Pens and Holders	$	$	$3.50	$4.20	$4.90	$5.60
No. 9312	10k Pens and Holders				3.50	4.20	4.90

GOLD PENS IN SEAMLESS GOLD FILLED CHASED PEARL DESK HOLDERS

		No. 1 Pen.	No. 2 Pen.	No. 3 Pen.	No. 4 Pen.	No. 5 Pen.	No. 6 Pen.
No. 9313	14k Pens and Holders	$2.80	$3.40	$3.85	$4.55	$5.05	$
No. 9314	10k Pens and Holders	2.60	2.95	3.50	3.85	4.35	

GOLD PENS IN SEAMLESS GOLD FILLED SWELL PEARL DESK HOLDERS

		No. 1 Pen.	No. 2 Pen.	No. 3 Pen.
No. 9315	14k Pens and Holders	$	$	$4.55
No. 9316	10k Pens and Holders			4.00

GOLD PENS IN SEAMLESS GOLD-FILLED CHASED PEARL SLIDE HOLDERS

		No. 1 Pen.	No. 2 Pen.	No. 3 Pen.	No. 4 Pen.	No. 5 Pen.	No. 6 Pen.
No. 9317	14k Pens and Holders	$4.55	$4.55	$4.90	$5.75	$6.55	$7.70
No. 9318	10k Pens and Holders	3.40	3.85	4.35	5.05	5.85	6.65

GOLD PENS IN SEAMLESS GOLD FILLED FANCY CUT GOLD FILL AND WIRE PEARL DESK HOLDERS

		No. 1 Pen.	No. 2 Pen.	No. 3 Pen.
No. 9319	14k Pens and Holders	$3.50	$4.55	$5.25
No. 9320	10k Pens and Holders	2.80	3.10	4.75

GOLD PENS IN SEAMLESS GOLD FILLED CHASED, FANCY CARVED COMBINATION PEARL PAPER CUTTER AND PEN HOLDERS

		No. 1 Pen.	No. 2 Pen.	No. 3 Pen.
No. 9321	14k Pens and Holders	$3.50	$4.10	$4.55
No. 9322	10k Pens and Holders	3.30	3.85	4.00
No. 9323	Holders only, two styles, Stag and Crane	2.35	2.60	2.80

ENGRAVED BARREL PEN IN PEARL DESK HOLDER

No. 9324 14k No. 5 Pen. Engraved Barrel Pen in Pearl Desk Holder.....$3.40
No. 9325 14k No. 7 Pen. Engraved Barrel Pen in Pearl Desk Holder.....3.80

SEAMLESS PENHOLDERS.

WILL WEAR LIKE SOLID GOLD.

ENGRAVED BARREL PENS IN EBONY DESK HOLDERS

No. 9326 14k Pen No. 7 ...Price each $7.00
No. 9327 14k Pen No. 5 ...Price each 5.60

GOLD PENS IN SEAMLESS GOLD FILLED EBONY SLIDE HOLDERS.

		No. 1 Pen.	No. 2 Pen.	No. 3 Pen.	No. 4 Pen.	No. 5 Pen.	No. 6 Pen.	No. 7 Pen.
No. 9328	14k Pens and Holders	$	$	$	$	$3.5[illegible]	$4.55	$5.60
No. 9329	10k Pens and Holders				2.80	3.15	3.75	4.90

GOLD PENS IN GOLD FILLED EBONY TELESCOPIC HOLDERS

		No. 3 Pen.	No. 4 Pen.	No. 5 Pen.	No. 6 Pen.
No. 9330	14k Pens and Holders	$3.15	$3.50	$3.85	$4.55
No. 9331	10k Pens and Holders	2.80	2.80	3.15	3.75

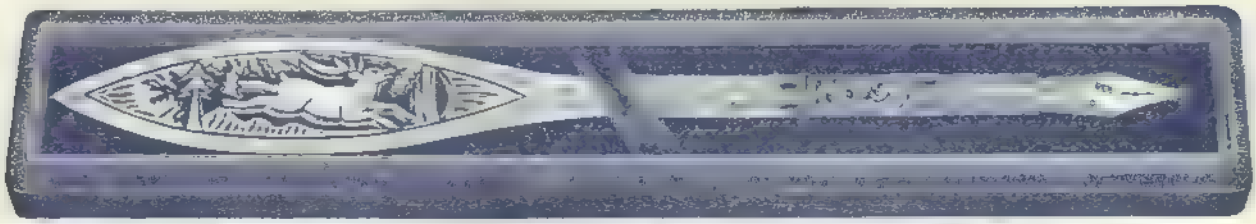
GOLD PENS IN SEAMLESS GOLD FILLED EBONY DESK HOLDERS

		No. 1 Pen.	No. 2 Pen.	No. 3 Pen.	No. 4 Pen.	No. 5 Pen.	No. 6 Pen.	No. 7 Pen.	No. 8 Pen.	No. 9 Pen.	No. 10 Pen.
No. 9332	14k Pens and Holders	$1.75	$2.[illegible]	$2.45	$2.80	$3.15	$3.85	$4.[illegible]	$5.95	$7.25	$8.[illegible]
No. 9333	10k Pens and Holders	.55	1.65	1.[illegible]	2.10	2.45	2.80	3.[illegible]			
No. 9334	Holders only	.60	.60	.70	.70	.70	.70	.80	.95	1.05	1.[illegible]

FINE ASSORTED CASE GOODS

PUT UP IN PLUSH BOXES.

No. 9335 10 karat gold pen in pearl desk ho[illegible] size of illustration, in plush lined box [illegible] $1.75

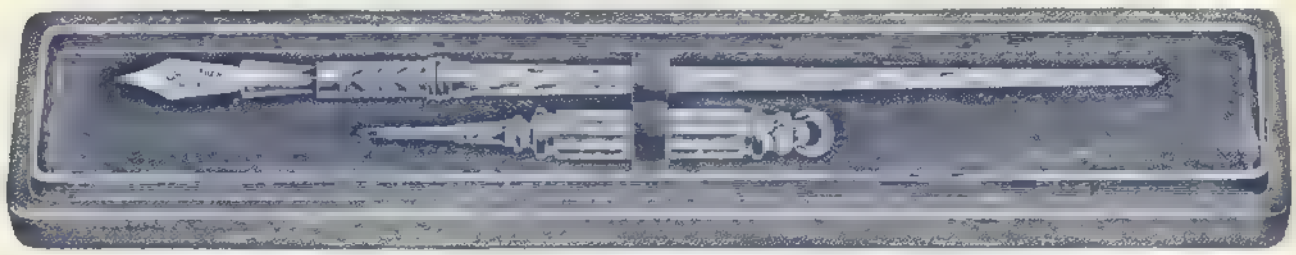


No. 9336 Gold filled, seamless [illegible] chased pearl [illegible] ...me plush box [illegible] 14k $4.00
No. 9337 Gold filled, seamless [illegible] chased pearl [illegible] ...me plush box [illegible] 10k 4.35

[illegible]

		No. 1 Pen.	No. 2 Pen.	No. 3 Pen.
No. 9338	14 karat ... Price per set	$2.35	$2.80	$3.30
No. 9339	10 karat ... Price per set	2.10	2.45	2.80

Colored pearl sticks same price No. 1 only, assorted colored boxes



No. 9340 14 karat, gold filled, seamless pearl desk holder with [illegible] pearl [illegible] pencil in handsome velvet box ..Price per set $5.10
No. 9341 10 karat, gold filled, seamless, pearl desk holder with [illegible] pearl [illegible] screw pencil, in handsome velvet box ..Price per set 4.60

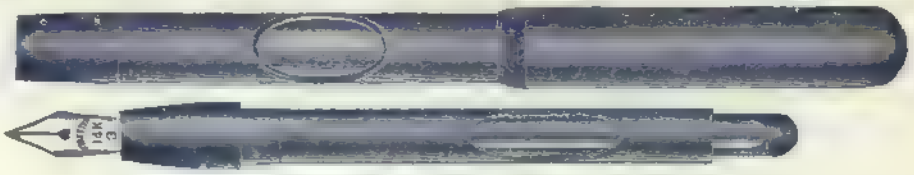
Gold pen, in gold filled, seamless rustic pearl desk holder with ladies' gold filled pencil, in velvet lined box

No. 9342 14 karat, No. 1 pen [illegible] Price per set $2.35
No. 9343 10 karat, No. 1 pen ..... [illegible] per set 2.10

THE FAULTLESS SELF-FILLING FOUNTAIN PEN

The Most Perfect Self-Filling Fountain Pen Made.

The Faultless Self-Filling Fountain Pens are of a very durable construction, yet so simple that they never get out of order. The reservoir is filled with ink by the [illegible] pressure of the finger. They are made by skilled mechanics, from finest grade of materials obtainable. The pen points are **extra heavy 14 karat solid gold** [illegible] with the best **genuine iridium** that never wears out. All pens are furnished in fine, medium or stub points. Each pen [illegible] to give perfect satisfaction for **five years.**



BI-SECTED VIEW SHOWING THE DIFFERENT PARTS.

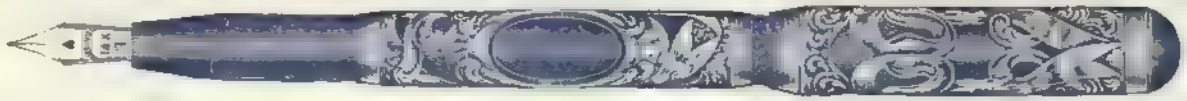
DIRECTIONS FOR FILLING.

Turn the pen section around until opening in barrel shows inner rubber tube with metal bar cross. Dip pen in ink until ink entirely covers the gold pen. Then compress metal bar with finger and release it, filling pen. Then turn pen section back to original position so that inner rubber tube cannot be seen.

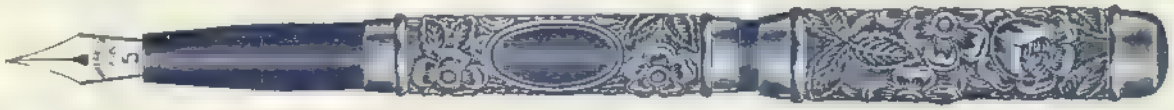
No. B10 Fitted with No. 1, 14 karat solid gold pen, black, mottled or [illegible] holder — Each $2.00
No. B211 Fitted with No. 2, 14 karat solid gold pen, black, mottled or chased holder — Each 2.70
No. B311 Fitted with No. 3, 14 karat solid gold pen, black, mottled or chased holder — Each 3.35
No. B411 Fitted with No. 4, 14 karat solid gold pen, black, mottled or chased holder — Each 4.00
No. 150 Fitted with No. 5, 14 karat solid gold pen, black, mottled or chased holder — Each 4.70
No. 160 Fitted with No. 6, 14 karat solid gold pen, black, mottled or chased holder — Each 5.35
No. 180 Fitted with No. 8, 14 karat solid gold pen, black, mottled or chased holder — Each 6.70

No. B30½ Fitted with No. 3, 14 karat solid gold pen, non-leakable cap, black or mottled holder, gold filled engraved band..... ..Each $4.00

No. B32 Fitted with No. 2, 14 karat solid gold pen, two gold filled bands, [illegible] holder, plain cap..... Each $3.35



No. B36 Fitted with No. 3, 14 karat solid gold pen, sterling silver or gold filled mounting, hand embossed Florentine finish..... Each $10.00



No. B37 Fitted with No. 7, 14 karat solid gold pen, gold filled mounting, heavy hand embossed..... Each $10.00

No. B28 Fitted with No. 2, 14 karat solid gold pen, gold filled barrels, black rubber ends .....Each $6.70

THE NEW NON-LEAKABLE FOUNTAIN PEN

Can Be Carried in Any Position and Will Not Leak.

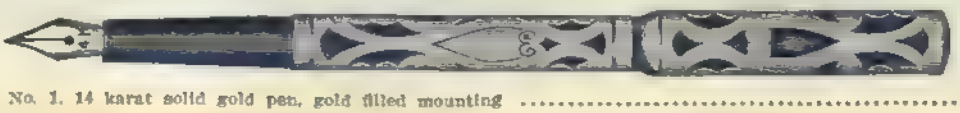
No. B103 Fitted with No. 4, 14 karat solid gold pen, black or mottled holder, vest pocket size — Each $3.35
No. B104 Fitted with No. 2, 14 karat solid gold pen, black or mottled holder, regular size — Each 3.35

LADIES' FOUNTAIN PENS. NON-SELF FILLER

Finest grade of mounting, 18 karat gold filled seamless stock, positively warranted to give satisfaction.

NON-LEAKABLE LADIES' FOUNTAIN PEN.

No. B101 Fitted with No. 1, 14 karat solid gold pen, two gold filled bands, black or red rubber holder — Each $4.00
No. B102 Fitted with No. 1, 14 karat solid gold pen, without bands and black or red rubber holder. — Each 2.70



No. B100 Fitted with No. 1, 14 karat solid gold pen, gold filled mounting .....Each $6.70

INCANDESCENT ELECTRIC LAMPS

REGULAR TYPE

DRAWN WIRE MAZDA LAMPS

The new Drawn Wire Mazda Lamp produces a Pure White Light which so closely resembles natural daylight that colors and shades can be accurately matched. The saving of Electric Current and its long life makes it a more economical lamp than the ordinary Carbon Lamp; it uses less current, produces more light and lasts longer than any other lamp. It is a most satisfactory Lamp for Residences and all Public Buildings

Can be used on either Direct or Alternating Current, and burned at any angle.

NOTE—Clear Bowl will always be sent unless otherwise specified

ROUND BULB

100 to 130 Volts; Standard Edison Base

Nos.	Watts	Candle Power	Diam. In.	Standard Package	Wt. Std. Pkg.	Clear Bowl Each	Frosted Bowl Each
S171	15	12	2 1/8	100	45	$0.50	$0.53
S172	20	16	2 1/8	100	45	.50	.53
S191	25	20	2 1/8	100	45	.50	.53
S211	40	32	2 5/8	100	60	.55	.59
S241	60	50	3 1/16	50	50	.75	.80
S301	100	80	3 5/8	24	32	1.10	1.17
S351	150	125	4 5/8	24	33	1.65	1.75
S401	250	200	5	12	37	2.30	2.45

200 to 260 Volts; Standard Edison Base

Nos.	Watts	Candle Power	Diam. In.	Standard Package	Wt. Std. Pkg.	Clear Bowl Each	Frosted Bowl Each
S192	25	20	2 5/8	50	30	$0.80	$0.84
S212	40	32	2 5/8	50	30	.90	.95
S242	60	45	3 1/8	50	50	1.20	1.27
S302	100	80	3 5/8	24	32	1.70	1.80
S352	150	120	4 5/8	24	33	2.40	2.55
S402	250	200	5	12	20	3.30	3.50

100 to 130 Volts; Short Edison Base

Nos.	Watts	Candle Power	Diam. In.	Standard Package	Wt. Std. Pkg.	Clear Bowl Each	Frosted Bowl Each
G181	15	12	2 1/8	100	45	$0.80	$0 83
G182	25	20	2 1/8	100	45	.80	83
G301	40	32	3 3/4	24	30	1.00	1 07
G401	60	45	5	24	36	1.25	1 40
			With Large Edison Street Series Base				
G561	400	300	7	8	45	4 15	4.40
G641	500	375	8	8	50	4.55	4 85

200 to 260 Volts; Skirted Base

Nos.	Watts	Candle Power	Diam. In.	Standard Package	Wt. Std. Pkg.	Clear Bowl Each	Frosted Bowl Each
G302	40	32	3 3/4	24	32	$1.50	$1.60
G402	60	45	5	24	36	1.90	2.10

MAZDA SIGN LAMPS; EDISON BASE

10 to 13 Volts; Specially selected for Series and Multiple Series Burning

Nos.	Watts	Candle Power	Diam. In.	Standard Package	Wt. Std. Pkg.	Clear Bowl Each	Frosted Bowl Each
S141	2 1/2	2	1 3/4	100	36	$0.30	$0.33
S142	5	4	1 3/4	100	36	.30	.33
S178	10	8	2 1/8	100	45	.50	.53

NOTE—We can furnish from Minneapolis stock Mazda Lamps in above wattages, Standard Edison Base, in from 6 to 65 Volts

REGULAR TYPE

TANTALUM LAMPS

Produces a Brilliant White Light by which it is possible to distinguish all colors; it is much more economical than a common Carbon Lamp on account of its greater efficiency and long life. Specially adapted for Direct Current; we do not recommend its use on Alternating Current; can be burned at any angle.

NOTE—Clear Bowl will always be sent unless otherwise specified

ROUND BULB

100 to 130 Volts; Standard Edison Base

Nos.	Watts	Candle Power	Diam. In.	Standard Package	Wt. Std. Pkg.	Clear Bowl Each	Frosted Bowl Each
S193	25	12 1/2	2 5/8	100	32	$0.42	$0.44 1/2
S194	40	20	2 5/8	100	32	.42	.44 1/2
S195	50	25	2 5/8	100	32	.42	.44 1/2
S243	80	40	3 1/2	60	32	.70	.73
			200 to 260 Volts; Short Edison Base				
S196	60	25	2 5/8	50	40	.83	.87
			200 to 260 Volts; Skirted Base				
S303	80	40	3 5/8	24	40	1.06	1.12

100 to 130 Volts; Short Edison Base

Nos.	Watts	Candle Power	Diam. In.	Standard Package	Wt. Std. Pkg.	Clear Bowl Each	Frosted Bowl Each
G252	25	12 1/2	3 1/8	50	36	$0.50	$0 53
G303	40	20	3 1/4	24	30	.58	.61
			100 to 130 Volts; Skirted Base				
G403	80	40	5	24	45	.83	.83
			200 to 260 Volts; Skirted Base				
Nos.	Watts	Candle Power	Diam. In	Standard Package	Wt. Std. Pkg	Clear Bowl Each	Frosted Bowl Each
[illegible]	50	25	3 3/4	24	32	$1.20	$1.27
G404	80	40	5	24	36	1.50	1 66

NOTE—All Lamps having the same Standard Package quantity can be assorted to make Standard Package in ordering

For Lamp Changer, see page 477

INCANDESCENT ELECTRIC LAMPS

GEM FILAMENT LAMPS

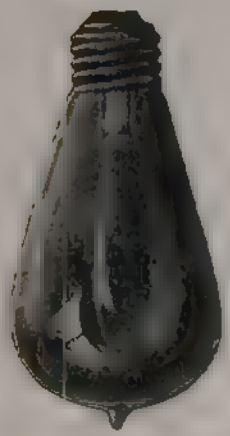
The Gem Metallized Filament Lamp, operating at an efficiency of 2½ Watts per Candle Power has a life equal to the Carbon Lamp giving a much whiter light, and is rapidly taking the place of the former Carbon Lamps

REGULAR TYPE

100 to 130 Volts, Standard Edison Base

Nos.	Watts	Diam. In.	Standard Package	Weight Std. Pkg.	Clear Bowl Each	Frosted Bowl Each
S174	30	2⅛	200	45	$0.20	$0.22½
S197	40	2⅛	200	45	.20	.22½
S198	50	2⅜	200	45	.20	.22½
S199	60	2⅜	200	45	.20	.22½
S244	80	3	100	35	.30	.33
S245	100	3	100	35	.30	.33

CARBON LAMPS



OVAL ANCHORED LAMPS

100 to 130 Volt; Standard Edison Base

Nos.	Watts	Candle Power	Diam. In	Standard Package	Wt. Std. Pkg.	Clear Bowl Each	Frosted Bowl Each
S175	20	4	2⅛	200	45	$0.16	$0.18½
S176	25	8	2⅛	200	45	.16	.18½
S177	30	10	2⅛	200	45	.16	.18½
S1901	50	12½	2⅜	200	45	.16	.18½
S1902	60	16	2⅜	200	45	.16	.18½
S246	100	25	3	100	25	.24	.27
S247	120	32	3	100	25	.24	.27

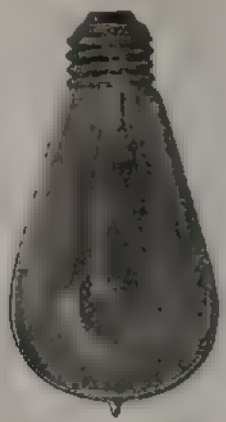
200 to 275 Volts; Standard Edison Base

Nos.	Watts	Candle Power	Diam In.	Standard Package	Wt. Std. Pkg.	Clear Bowl Each	Frosted Bowl Each
P191	25	10	2⅜	200	45	$0.18	$0.20½
P211	60	16	2⅜	200	45	.18	.20½
S248	120	32	3	100	25	.32	.35

SIGN LAMPS

100 to 130 Volts; Oval Anchored

Nos.	Watts	Candle Power	Diam In.	Standard Package	Wt. Std. Pkg	Clear Bowl Each	Frosted Bowl Each
S141	10	2	1¾	200	40	$0.16	$0.18½
S142	20	4	1¾	200	40	.16	.18½



OVAL ANCHORED REFILLED LAMPS

104 Volt; Standard Edison Base

Nos.	Watts	Candle Power	Diam. In.	Standard Package	Weight Std. Pkg.	Clear Bowl Each
S178	20	4	2⅛	200	45	$0.12
S179	25	8	2⅛	200	45	.12
S1903	60	16	2⅜	200	45	.12
S249	120	32	3	100	25	.20

110 Volt; Standard Edison Base

S1701	20	4	2⅛	200	45	.12
S1702	25	8	2⅛	200	45	.12
S1904	60	16	2⅜	200	45	.12
S2401	120	32	3	100	25	.20

ROUND BULB

100 to 130 Volts; Standard Edison Base

Nos.	Watts	Candle Power	Diam. In	Standard Package	Wt. Std Pkg	Clear Bowl Each	Frosted Bowl Each
G183	30	8	2½	200	45	$0.20	$0.22½
G184	60	16	2½	200	45	.20	.22½
G253	120	32	3⅛	100	40	.32	.35

NOTE—All Lamps having the same Standard Package quantity can be assorted to make Standard Package in ordering

For Lamp Changer, see page 477

INCANDESCENT ELECTRIC LAMPS

ROUND TYPE
Type G

CANDELABRA LAMPS

For decorating purposes

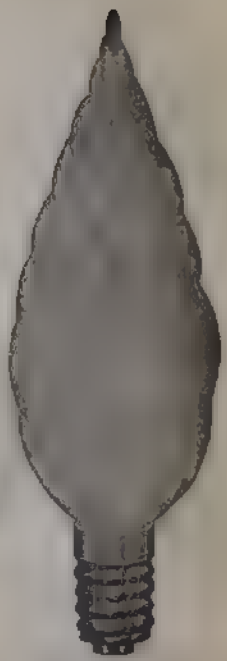
ROUND BULB; 100 TO 130 VOLTS

Nos.	Watts	Candle Power	Diam. In.	Standard Package	Wt. Std. Pkg.	Clear Bowl Each	Frosted Bowl Each
G161	30	8	2 3/16	200	35	$....	$....
G162	56	16	2 3/16	200	35	....	....

SPIRAL BULB; 100 TO 130 VOLTS

Nos.	Watts	Candle Power	Diam. In.	Standard Package	Wt. Std. Pkg.	Clear Bowl Each	Frosted Bowl Each
D1	30	8	1¼	200	35	$....	$....

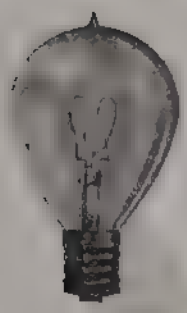
Note—We can furnish above Candelabra Lamps in any color on Special Order from Minneapolis stock, as well as many other shapes and sizes, prices on application.



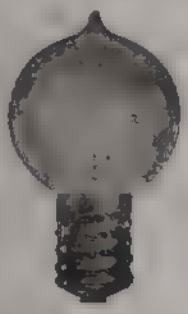
SPIRAL BULB
Type D

BATTERY LAMPS

These low voltage lamps are especially adapted for automobile and launch lighting.



PEAR SHAPED



ROUND BULB

MAZDA TUNGSTEN FILAMENT; 6 TO 8 VOLTS

Pear Shaped; With Candelabra Base

Nos.	Watts	Candle Power	Diam. In.	Amperes	Clear Bowl Each	Frosted Bowl Each
P91	7½	6	1⅛	1.25	$....	$....
P92	10	8	1⅛	1.70	....	....

Pear Shaped; With Miniature Base

Nos.	Watts	Candle Power	Diam. In.	Amperes	Clear Bowl Each	Frosted Bowl Each
P93	7½	6	1⅛	1.25	$....	$....
P94	10	8	1⅛	1.70	....	....

Round Bulb; With Candelabra Base

Nos.	Watts	Candle Power	Diam. In.	Amperes	Clear Bowl Each	Frosted Bowl Each
G101	7½	6	1¼	1.25	$....	$....
G102	10	8	1¼	1.70	....	....

Round Bulb; With Miniature Base

Nos.	Watts	Candle Power	Diam. In.	Amperes	Clear Bowl Each	Frosted Bowl Each
G103	7½	6	1¼	1.25	$....	$....
G104	10	8	1¼	1.70	....	....

Note—Can furnish from Minneapolis stock Battery Lamps, both Pear Shaped and Round Bulb, in from 4 to 30 Candle Power, 6 to 30 Volts, in Miniature, Candelabra or Edison Candelabra Base.

TUBULAR LAMPS, CARBON FILAMENT

100 to 130 Volts; Standard Edison Base

Nos.	Watts	Candle Power	Diam. In.	Standard Package	Wt. Std. Pkg.	Clear Bowl Each	Frosted Bowl Each
T101	30	8	1¼	200	40	$0.24	$0.26½
T102	60	16	1¼	200	40	24	26½
T141	120	32	1⅝	100	40	.44	.47

200 to 275 Volts; Standard Edison Base

Nos.	Watts	Candle Power	Diam. In.	Standard Package	Wt. Std. Pkg.	Clear Bowl Each	Frosted Bowl Each
T103	60	16	1¼	200	40	$0.34	$0.36½

For Lamp Changer, see page 477

TURN DOWN ELECTRIC LAMPS

ECONOMICAL TURN DOWN LAMPS

Have two light giving filaments—one of the usual size, giving 16 C. P., the other, very small, for 1 C. P. Fits any style of fixture, working upright, downward or horizontally. When turned to Dim, will save 80% current and last as long as four ordinary lamps. A great convenience in Bed, Bath or Sick Rooms.

TURN BULB
A Slight Twist Changes the Light

	Each
No. 360A—104 Volt, Edison Base	$0.60
No. 360B—110 Volt, Edison Base	.60
No. 360C—115 Volt, Edison Base	.60

STRING PULL
With 5 inch Strings and ¾ inch Celluloid Discs

	Each
No. 360D—104 Volt, Edison Base	$0 60
No. 360E—110 Volt, Edison Base	.60
No. 360G—115 Volt, Edison Base	.60

200 Lamps in a Standard Package; Weight 50 Lbs.
Other Voltages than above can be shipped from Factory

ECONOMICAL LONG CORD TURN-DOWN LAMPS

Very similar in operation to Turn Bulb and String Pull Lamps (Shown above), having two Light Giving Filaments of 16 and 1 C. P. respectively. This Lamp has a heavily Insulated, Triple Strand Lamp Cord with a Brass Pull Chain Switch at the end, to control the Light; it can be turned on or off or made bright or dim from any part of the room; Cord and Switch are Detachable and are Indestructible.

	Per Set
104 Volts, Edison Base	
No. 360H—With 3 ft. Cord	$2 00
No. 360K—With 6 ft. Cord	2 30
No. 360L—With 10 ft. Cord	2 70
110 Volts, Edison Base	
No. 360M—With 3 ft. Cord	$2 00
No. 360N—With 6 ft. Cord	2 30
No. 360P—With 10 ft. Cord	2.70
115 Volts, Edison Base	
No. 360R—With 3 ft. Cord	$2 00
No. 360S—With 6 ft. Cord	2 30
No. 360T—With 10 ft. Cord	2 70

Cord and Socket and Lamp in Separate Cartons; Wt. 5 Oz. per Set

DIM-A-LITE

A Turn-Down Attachment for an Incandescent Lamp, makes any Lamp a Turn-Down Lamp, can be attached in a few seconds, simply remove lamp from socket, screw it into the Dim-a-lite and place Dim-a-lite in socket; Perfectly suitable for the new metal filament lamps; Approved by Fire Underwriters; produces five changes of light—full, dim, low, night light and out, Standard Edison Socket.

110 Volts

	Each
No. 360V—Gun Metal, Chain Pull	$1.00
No. 360W—Brushed Brass, Chain Pull	1.25

Standard Package 100

Weight about 4 Oz. Each

Note—We can furnish 220 Volt Dim-o-lites on Special Order at an additional list of 10c Each.

BELLOWS

Made of thoroughly seasoned Lumber. The Split Leather is the Grade most commonly used. In the Grain Leather Bellows, the same Grade Leather is used as in Boots and Shoes or the Better Grade of Harnesses. These are for Extra Heavy Work. Used in Mines, Machine Shops, by Blacksmiths, Horse Shoers, Carriage and Wagon Makers, Etc.

No. 101—STANDARD BLACKSMITHS', SPLIT COWHIDE LEATHER

Width, In.	24	26	28	30	32	34	36	38	40	42
Length, In.	42	45	48	51	54	59	64	68	72	78
Weight Each, Lbs	30	35	40	45	50	60	68	76	86	108
Each	$10 00	11 00	12 00	13.00	14.00	16 00	18.00	20 00	23 00	27 00

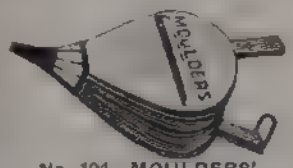
No. 102—EXTRA LONG, SPLIT LEATHER

Width, In.	36	38	40	42	44
Length, In.	74	80	82	84	88
Weight Each, Lbs.	85	96	103	130	145
Each	$21.00	24.00	28.00	34 00	40 00

No. 103—EXTRA LONG, GRAIN LEATHER

Width, In.	46	48	50	52
Length, In.	96	99	104	109
Weight Each, Lbs.	190	200	230	245
Each	$45 00	50.00	60 00	70.00

Open Stock



No. 104—MOULDERS'

Used by Moulders, Printers, Tailors, Electricians, Confectioners, Coppersmiths, Etc.

Width, In.	10	12
Length, In.	22	24
Weight per Doz., Lbs.	21	32
Per Dozen	$15.00	18.00

No. 105—HAND

For Starting Household Fires, Blowing Dust out of Pianos, Machinery, Etc. Blowing Insect Powder, Etc.

Width, In.	7	8	9	10
Length, In.	15½	16½	17½	18½
Weight per Doz., Lbs.	15	17	21	25
Per Dozen	$11.00	12.00	13.60	16.00

TUYERE IRONS

Sectional View

VULCAN BUFFALO

Has a Heavy Cast Fire Pot with an adjustable Tuyere Valve or Ball at bottom through which the blast is driven by means of two converging air channels giving a rapidly whirling Blast, concentrating the fire like a Blow Torch and Producing a hot, white heat, with less fuel than any other Tuyere Iron. Will produce a welding heat on a 12 inch bar in the same time and with the same blast required for a 4 in. Bar in other Tuyere Irons

Each

No. 14—Inside Dimensions, 12½x14x4½ inches $6 00

Weight 56 Lbs. Each

NORTON

The Blast is regulated by turning the Large Rod; Simple and Convenient, Reversible for Right or Left Hand; Cinders and Ashes Removed by drawing out small Rod at Side.

Each

No. 31—Length Over-all 31 in.; Weight 27 Lbs. Each $3.00

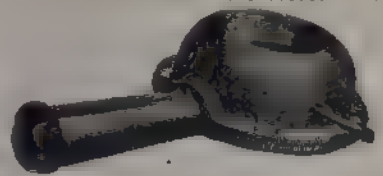
POWERS' CAST IRON FIRE POTS

Fits any Common Tuyere Iron, Prevents Fire from Spreading and Produces a Compact Bright Heat. Saves Coal and Protects the Tuyere Iron

Each

No. 12—Size of Bowl 12x12x⅝ in. $1 40

Weight 24 Lbs. Each

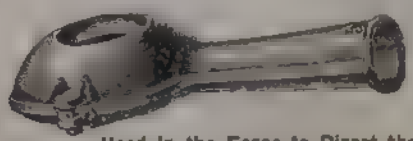


CLARK

Made with Ball Valves and Stub Rod for Turning same; Convenient and Durable; Cast Iron

	Length	Diameter	*Each
No. 1—Light	15 in.	8 in.	$2.60
No. 2—Medium	16 in.	9 in.	3.10
No. 3—Heavy	17 in.	10 in.	3.60

Weights 18, 20½ and 26 Lbs. Each



DUCK NESTS

Used in the Forge to Direct the Force of Draft from the Bellows into the Center of the Fire

SINGLE PATTERN

Each

No. 8—Length 14 in.; Diam. of Bowl 8 in $0.75

Weight 3⅛ Lbs. Each

DOUBLE PATTERN

Two Faces, Reversible

Each

No. 16—Length 14 in.; Diam. of Bowl 8 in $1 00

Weight 12 Lbs. Each

All Above, Open Stock

BLACKSMITHS' BLOWERS

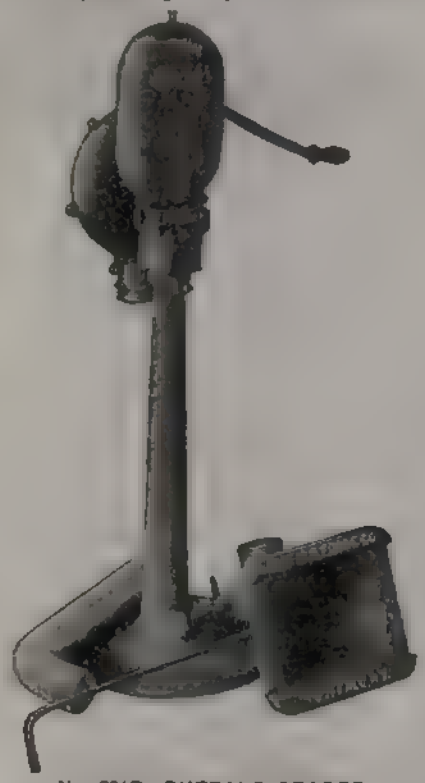
BUFFALO FORGE CO.

The most Practical and Efficient Blast Producing Machines which Human Ingenuity and Mechanical Science can build; High Speed, Cast Steel Gears, with broad, accurately cut Teeth; Adjustable Ball Bearings and Helical Gears insure a smooth running, noiseless operating Blower, with double the Blast of other Blowers using the same effort; Hand Finished (not dipped) and fine appearing, they are appreciated by the Best.

No. 200—BUFFALO SILENT
Mounted on Legs

Complete with Buffalo Heavy-Duty Vulcan Tuyere and all Necessary Piping.

	Each
No. 200—With 12 in. Face.....	$37.00
Weight 150 Lbs. Each	
No. 200—With 14 in. Face.....	45.00
Weight 155 Lbs. Each	



No. 201P—BUFFALO GEARED
Mounted on Pedestal Stand

Same as No. 200, except that it has a Special Shaped Fan Case that permits of crank being turned in either direction with equal efficiency.

	Each
No. 201P—With 12 in. Face.....	$37.00
Weight 155 Lbs. Each	

No. 32—CLIMAX
Mounted on Legs

A low priced Blower built similar to No. 200, for Light Work; Tuyere and general construction throughout are lighter than No. 200. A good serviceable article; complete with Tuyere and Pipe.

	Each
No. 32—With 12 in. Face.....	$27.00
Weight 100 Lbs. Each	

The Buffalo Blowers shown above are suitable for the heaviest kind of Blacksmith's or Machine Shop work. The Helical Gears used are the most perfect High Speed Gears known; balanced at end thrusts on the finest Adjustable Ball Bearings. The Fan Case is scroll shaped, the fan almost completely clears the Delivery Channel, so that the blast is shot out straight from the Fan Blades to the fire, instead of being obstructed by a 90° Angle. The strength put into the Handles goes into the blast for fire

The Two Sides of the Gear Case in which the Bearings are boxed and reamed, consist of one solid casting, so it is impossible for the Bearings to lose their perfect alignment or for the oil to leak out.

The crank turns either way, but with equal efficiency only on No. 201P.

The Climax Blowers are recommended for Farm Work, lighter Smithing and Repair Shops, where the duty required is not of the heaviest kind. It has Helical high-speed gears and a compact blower-head; The Fan Pinion runs in a bath of oil and lubricates other parts by splashing, which prevents heating and insures easy running; The Fan can be turned in any direction, and the crank will go forward or backward; the Gear Case is Oil-tight and Dust-proof.

ELECTRIC BLOWERS

With Universal Motor and 6-Speed Regulator; For Direct and Alternating Current.

Has no exposed working parts that can be disturbed by inexperienced hands; easily installed by an Electrician and turns on or off like a light; Average cost per Fire per month is 40 to 60 cents, based on 10 cent kilowatt.

No. 2E is sufficient for one Fire; No. 2FH for 1 Large Blacksmith's or 2 Horseshoers' Fires, and No. 3E for 2 Blacksmiths' or 3 Horseshoers' Fires.

Nos.	110 Volt Each	220 Volt Each	Revolutions per min.	Diam. Outlet, In.	Height Overall, In.	Wt. Each Lbs.
2E	$40.00	46.00	2200	3	15	50
2EH	56.00	68.00	3000	3	15	55
3E	72.00	84.00	3000	4	15	60

BLOWERS AND EXHAUSTERS

BUFFALO FORGE CO.

"B" VOLUME EXHAUSTERS

Furnished with Left and Right Hand Bottom Horizontal Discharge unless otherwise specified. Splendid Construction and Bearings are secured to the Shell of the exhauster in a Rigid manner, allowing the Blast wheel to be overhung, which assures an unobstructed opening for the inlet; Bearings have ring oiling device, which keeps perfect lubrication and cools the Bearings at Continuous High Rotative Speeds; For removing smoke from Forges or Shops, Refuse from Emery Wheels, etc., the best solution of the problem of preventing undesirable accumulation or of saving valuable material otherwise wasted.

Size, Nos.	Exhauster, Each	Countershaft, Height Extra, Each	Overall, Inches	Diam. Outlet, Inches	Size of Pulley, Inches	Wt Each Lbs
000B	$15.00	10 00	14½	5⅛	2¾x2¼	45
1B	20.00	12.00	15¾	4⅞	3 x2½	60
2B	25 00	16.00	20¼	6⅛	3¼x2⅝	100
3B	33 00	20.00	25	7⅝	4 x3	170
4B	44 00	25 00	29	9	5 x3⅞	200
5B	55 00	30.00	33	10⅝	5¾x4⅝	275
6B	70 00	40 00	37½	11⅜	6½x5¼	380
7B	90.00	50 00	45	14	7½x6¼	576

REVERSIBLE STEEL PLATE EXHAUSTERS

Have reversible Housing and are Adjustable to any direction of Discharge; Construction includes Heavy Steel Plate Housing, well braced, Ring oiling Bearings, Vanes of Fan Wheel riveted to spokes and also to heavy steel plate side Flanges; Long Life, as well as maximum Intake and Discharge Insured; Every Fan is Tested; For use in all types of Fan Systems, Exhaust Systems, Planing Mills, etc., to take care of smoke from Down Draft Forges, Shavings from Planers, Sawdust, Emery or other Grinding Dusts and all kinds of gases.

Size, Nos.	Single Fan Each	Width of Fan Inches	Outside Diam. of Inlet Inches	Outside Size of Outlet, Inches	Single Fan Pulleys Diam. Inches	Face Inches	Weight Each Lbs.
30	$ 55.00	32¼	12	11 x11	6	4½	225
35	70.00	36¼	14	12½x13½	7	5½	320
40	90 00	39½	16	14 x14	8	6½	450
45	115.00	43½	18	16 x16	9	7½	590
50	150 00	47¼	20	18 x18	10	8½	760
55	185 00	51	22	19½x19½	11	9½	950
60	200.00	54	24	21 x21	12	10½	1050

Can be furnished with Double Fan, Prices upon application

Right Hand

Left Hand

STEEL PRESSURE BLOWERS

Designed and Built Especially to withstand the strains of High Pressure Duty; for supplying Blast to Cupolas, Furnaces, Forge Fires, Sand Blast Machines and for any work where air is to be forced a long distance, as in Pneumatic Tube Systems, etc., Solid Peripheral Shell with Side Plates securely Bolted thereto; Long Adjustable Bearings insure correct alignment.

A Blower is Right or Left Hand, according to the Pulley as you Face the Outlet R. H. or L. H.

Size Nos.	Blower, Each	Countershaft Extra, Each	Height, In	Outlet, Diam., In.	Pulley, Size, In	Weight, Lbs.
1	$ 12.00	$ 8.00	12	3⅛	2¼x1¾	55
2	18.00	10.00	15½	4	2¾x2¼	75
3	25 00	12 00	19	4⅝	3 x2⅝	95
4	36 00	16.00	23½	5	4 x3	135
5	44.00	20.00	26¾	5⅝	4½x3	180
6	55.00	25.00	29¼	6¼	4½x3½	265
7	70.00	30.00	33	7¼	5 x4½	308
8	90.00	40.00	38	8	6 x4½	445
9	115.00	50.00	43½	10	7 x5	635
10	160 00	70 00	56	12¼	8 x6¾	820
11	225 00	80 00	65	14⅝	8½x6½	1400
11½	275 00	90 00	75	16¾	10 x7	1900
12	325 00	100 00	80	18	10 x8	1950

Size Nos. 1 to 6 have but One Pulley; Larger Sizes, Two Pulleys
All Above, One in a Crate

DUST AND REFUSE COLLECTORS

Built of Heavy Galvanized Steel; Imposes no Back Pressure on Fan and Collects all Refuse, Dust, etc., from the Air Current.

Diam. Inlet, In.	Refuse Outlet, In.	Diam. Shell, In.	Length Collector, In.	Each
10	8	40	69	$125.00
12	8	48	83	175.00
14	8	56	96	200.00
16	8	64	109	225.00
18	9	72	123	250.00
20	10	80	136	275.00
22	11	88	150	300.00
24	12	96	163	325.00
26	13	104	176	350.00
28	14	112	189	375.00
30	15	120	202	400.00
32	16	128	216	430 00
34	17	136	229	460.00
36	18	144	244	500.00

PORTABLE BLACKSMITHS' FORGES

BUFFALO FORGE CO.

These Forges are furnished either with or without Detachable Sheet Metal Water Tank; There is not a weak spot in their construction, which involves no complicated parts; Large and roomy hearths, Every Forge hand painted and fine in appearance; All are fitted with No. 200 Buffalo Silent Blower, which insures a Strong, Steady Blast.

The Blower is at right angles to the Forge; the user stands with Face out of hange of Fire.

STEEL PLATE FORGE, with Crank

Constructed of heavy Steel Plate, reinforced with Angle Irons, and supported on well braced angle iron legs; Equipped with new self-closing ash grate; Light, Strong, Space-saving, a Forge for delicate Tempering or Heavy Welding

Nos.	Size Fire Pan, In.	Style of Hood	Wt. Ea., Lbs.	With Tank Each	No Tank Each
500	21x24	Dash	190	$50.00	45.00
501	24x24	Half Hood	195	55.00	50.00
504	30x36	Half Hood	265	70.00	65.00
506	36x36	Full Hood	290	76.00	71.00

DOWN DRAFT FORGE

The patented Down Draft carries off all smoke and generated gases, keeping clear, pure air in the forge room; Most of smoke and gases consumed, lessening Fuel cost and giving quick clean welds; Used generally by Blacksmiths, and in Shops and Factories; Built of Heavy Cast Iron, with Heavy Pipe Legs, screwed into Hearth

Nos.	Size, of Hearth, In.	Wt. Ea., Lbs.	With Tank Each	No Tank Each
660	28x40	480	$ 74.00	70.00
680	38x42	800	100.00	95.00

BLACKSMITHS' PORTABLE FORGE

The Fire Pan is of extra heavy cast Iron and has lowered sides opposite fire place so that any size and shape work can be handled with deep or low fire; Blower located so that operator can stand in easy natural position close to fire when turning the crank; for General Work where an Extra Heavy Forge is not required

	Each
No. 650T—With Water Tank; 28x40 in. Hearth.. . . .	$54.00
Weight 275 Lbs. Each	
No. 650—Without Tank; Otherwise same as above.....	50.00
Weight 250 Lbs. Each	

STANDARD RIVETING FORGE

Large capacity, light weight and strong; the only riveting Forge equipped with a 12 in. Fan Case with the fan outlet arranged so the air is delivered straight from the Fan Blades; Gear Case is dust and weather proof; Helical high speed gears; Will heat more rivets per hour than any similar forge made; used by Boiler Makers, Bridge Builders, Contractors, Railroads, Ship Builders, etc.

Nos.	Style of Hood	Diameter Hearth, In.	Wt. Each Lbs.	Each
625	Shield	18	110	$35.00
626	Half Hood	18	125	37.00
625A	Shield	22	125	38.00
625B	Shield	24	140	41.00

Note—Electric Blower, instead of Regular No. 200, can be supplied for any Buffalo Forge at Special Cost.

HEAD LIGHTS

Best results are obtained by use of Head Light Kerosene Oil, see Mining Dept.

For Acetylene Shovel or Dredge Lights, see Builders Hardware Dept

Brass Stack 10 and 11 in. Stack

No. 100—LOCOMOTIVE

Heavy Steel Body, Finished in Black, XXX Tin Fount; Powerful Silver Plated Copper or Aluminum Reflector, No 2 Nickel Plated Burner, the 12 in. Size takes a ⅝ in. Wick, in an Argand Burner and No. 1 Chimney; the larger Sizes use our Headlight Wick, 1 ¼ in. in Diam., and Size 2 Headlight Chimney, 2¾ in. Base, 10 in. High; the 12 in. and 14 Sizes are adapted for Narrow Gauge Dinkies or Traction Engines.

Reflector, In.	12	14	16	18	20
Height, In.	24¾	28	31	31	33
Base, In.	16x6½	17½x6	20½x8	22x10	21½x11¼
Fount Holds, Qts.	1¼	3	4	4	4
Burns, Hours	11	12	15	15	16
Weight Each, Lbs.	36	60	75	75	95
Each	$24 00	30 00	35 00	40 00	50.00

These Lights are furnished with Side Numbers when so ordered

One in a Box

TRACTION ENGINE

Especially adapted for Traction Engines, Cable or Motor Cars; gives Strong, Brilliant Light. Draught is so arranged that the Flame will not smoke nor blow out in high winds nor jar out when passing over rough roads. Bracket shown on top of back is only used on Motor Cars.

Each

No. 150—10 in. Reflector, made of Copper, Silver Plated; Varnished Black, Heavy Sheet Steel Body, XXX Tin Fount, Height 21¼ in., Base 12x6½ in.; takes Mocbring Burner No. 81, Special Motor Burner; takes No. 87 Chimney, Base 10 in. High. Fount holds 2 Pints; Burns 20 Hours with One Filling; Complete with Bracket and Foot Piece $13 00

One in a Case, Weight 15 Lbs.

SIGNAL LIGHTS

TAIL LAMPS

For Rear Coach or Caboose Signals

Heavy Sheet Steel Body, Covered with a Coating of Tin and Japanned; Square Shaped Oil Pot drawn from Two Pieces of Steel No. 1 Swing Door for removing Oil Pot, cleaning Lenses or lighting. Outside Wick Raiser and Filling Hole for adjusting Flame; Adjustable Brackets for changing position of Lenses. Takes No. 1 Signal Burner with 4½ in. Shaft, ⅝ in. Wick, 5⅜ in. Lenses; Height 15 in., Base 7 in.; Holds 12 Oz. Oil, Burns 22 Hours at one filling of Kerosene Oil.

Nos.	832	833	834
Lights	2	3	4
Weight, Lbs.	17	19	21
Each	$6 00	7.50	10.00

All Above, One in a Box

With non-Sweating Ventilation, consisting of a Perforated Cone inside of which is a Solid Cone. The air enters the Lamp through the Perforated Cone, passes down the inside of the Perforated Cone, passes up through the Solid Cone and out of the top of the Lamp. This prevents the gathering of moisture, frost or ice on the inside of the Lens, thereby keeping the Lens clear and insuring the full signal power of the Lens at all times.

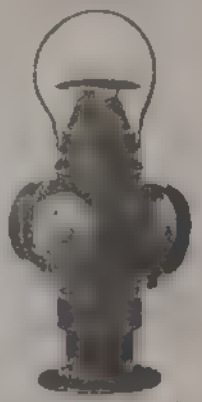
Made up of two pieces of Heavy Sheet Steel, securely bolted together, Drawn Sheet Steel Oil Pot, Fork Sockets have Springs to receive Lens; Compact, light, durable.

Each

No. 634 With Four 5⅜ in. Lenses; Height 13 in., Base 5½ in.; No. 1 Signal Burner; ⅝ in. Wick; Holds 9 oz. Oil, Burns 16 Hours at one Filling of Kerosene Oil $10 00

No. 632—With Two 4½ in. and Two 4⅜ in. Lenses, otherwise same as Above $10 00

Weight 17¼ Lbs. Each



SWITCH LAMPS

For use at Switches, Railroad Crossings, Bridge Approaches, etc.

Constructed of Heavy Sheet Steel Throughout; Top is attached to Body by a Hinge Hasp; the Base is riveted to the Bottom and fitted with a removable Cast Iron Socket, with Spring to relieve the jar of passing trains; the Fount is made of XX drawn Tin and is removable.

Each

No. 169 [illegible] Lenses, Height [illegible] Burns [illegible] Hours with One Filling of [illegible] ..... $[illegible]

Weight 17 Lbs. Each

Note—Any Color Lenses furnished as desired, Specify Colors Wanted. Best results will be obtained by using 150° Kerosene in above Lamps.

STEAM GAUGE or CAB LAMPS

With Hood

Each

No. 160—11¼x6¼ in., 22 Gauge Brass Polished, No. 1 Lard Oil Ratchet Burner, Burns Sperm or Signal Oil, Fount holds ½ Pint and Burns 12 to 14 Hours with one Filling $8 00

Open Stock; Weight 2 Lbs. Each

STEAM GAUGE OR CAB LAMP GLOBES

Each

No. 160B—Extra Globes with Brass Rim on Top and Bottom $2 70

Open Stock; Weight 1 Lb. Each

No. 160P—Extra Globes, Plain $0 50

Open Stock; Weight ½ Lb. Each

WATER GAUGE LAMPS

Each

No. 170—9½x3¾ in., 22 Gauge Brass, Polished; No. 1 Lard Oil Ratchet Burner, Burns Sperm or Signal Oil, Fount Holds ½ Pint and Burns 14 to 16 Hours with One Filling $2 00

Open Stock, Weight ½ Lbs. Each

LAMPS

BRACKET
For Side Wall or Stand

1½ Pint Glass Fount, French Bronzed, Swinging Iron Bracket, 8 in. Silvered Glass Reflector, No. 2 Sun Burner and Chimney, 1 in. Wick

Per Dozen

No. 1B—Plain Fount.....$9 00
No. 2B—Handled Fount..... 9 00

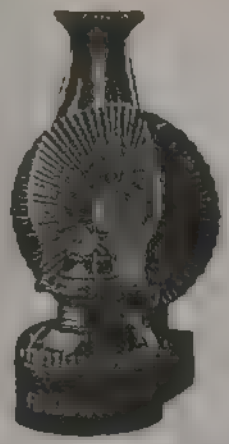
Weight 46 Lbs. per Dozen

CLIMAX
For Side Wall or Stand

Per Dozen

No. 10C—1½ Pint Blue Japanned Tin Fount, Burns 16 Hours, Solid Bright Tin Corrugated Reflector, No. 2 Sun Burner and Chimney, 1 in. Wick, Height 12 in..... $6 00

One Dozen in a Case
Weight 25 Lbs. per Dozen



FOR SIDE WALL OR STAND

Per Dozen

No. 100—Radiant, Blue Japanned Tin Bracket, 1 Pint Glass Fount, Burns 12 Hours, Plated, Bright Tin Reflector; No. 2 Sun Burner and Chimney, 1 in. Wick; Height 13 in.; Weight 30 Lbs. Dozen $5 40

LAMP FOUNTS

Chimneys not Included — Always Order Separately

Center Draught; Combined Lift and Ratchet, Screw Wick Adjustment.

JUNO PARLOR
With Burner and Tripod Shade Support

Per Dozen

No. 1J—Polished Brass Tank and Embossed Base, 10 in. Tripod, No. 2 Round Lift Burner and Wick; Height 12 in.; Diameter of Bowl 6 in., holds 2¾ Pints, burns 7 to 8 Hours; takes No. 2 Rochester Chimney 2⅝x10 in. $27 00

No. 2J—Nickel Plated Brass, otherwise same as No. 1J..... 30 00

Weight 36 Lbs. per Dozen

JUNO MAMMOTH STORE
300 Candle Power
With Burner and Wick

Per Dozen

No. 3J—Embossed, Polished Brass Tank, Holds 1 Gallon, Burns 12 Hours; No 3 Round Lift Burner and Wick, Height 11 in., Diameter 8⅝ in.; Takes No. 3 Rochester Chimney, 4x12 in. can be used with Harps No. 3B and 3BC, and as Bracket or Stand Lamp..... $36 00

Weight 48 Lbs. per Dozen
One in a Pasteboard Box

Center Draught; Combined Lift and Ratchet, Screw Wick Adjustment.

With Pipe Thread Base to take Burner and Nipple Used as Wick Lamp.

JUNO STORE
65 Candle Power
With Burner and Wick

Per Dozen

No. 30JB—Polished Brass Tank; Holds 3 Pint, Burns 9 Hours, No. 2 Round Lift Burner and Wick, Height 8½ in., Diameter [illegible] in., Takes No. 2 Rochester Chimney, 2⅝x10 in.; can be used with Harp No. 2B, and as Bracket or Stand Lamp..... $21 00

No. 30JN—Nickel Plated Brass, otherwise same as Above..... 24 00

Weight 24 Lbs. per Dozen

GLASS FOUNTS ONLY

PLAIN FOUNTS

1½ Pint, for Size 2 Burner and 1 in. Wick; Height 3⅞ in.; Diameter 6 Inches

Per Dozen

No. 1P—Without Handle.....$1 80

Five Dozen in a Case; Weight 105 Lbs. per Case

HANDLED FILLER FOUNTS

Per Dozen

No. 2H—1½ Pint, for Size 2 Burner and 1 in. Wick; Height 3⅞ in., Diameter 6 inches..... $2 40

Three Dozen in a Case; Weight 80 Lbs. per Case

STORE LAMPS

PLUMWOOD, BELGIAN BURNER

300 Candle Power
Height Over-all, 32 in.
Height of Fount, 11½ in.
Capacity, One Gallon
Burns 7 to 8 Hours

The Belgium Burner takes Smaller Wick and Chimney, but is claimed to have better Draft, gives more perfect Combustion and a Brighter Light than the Rochester.

Each

No. 3WB—Size 3, Complete, Polished Brass Fount, with Harp, 14 in. White Dome Shade, No. 00 Belgian 3x12 in. Chimney; No. 00 Belgian Wick; Net Weight 6 Lbs. Each..... $6.50
One in a Box; Weight 20 Lbs. Each

Each

No. 3PB—Size 3, Complete, Polished Brass Fount, with Harp, and 20 in. Corrugated Tin Reflector, Bright Inside, Blue Outside, No. 00 Belgian 3x12 in. Chimney; No. 00 Belgian Wick; Net Weight 6 Lbs. Each..... $6 00
One in a Box; Weight 20 Lbs. Each

STORE LAMPS

300 Candle Power

JUNO, MILLER OR ROCHESTER BURNER

Central Draft
Patent Lock Ring
Fount is put in and removed from below

65 Candle Power

Each

No. 30—Size 3, Complete, Embossed Polished Brass Fount with Harp; and 20 in. Corrugated Tin Reflector, Bright Inside, Blue Outside; No. 3 Rochester Chimney, 4x12 in.; No. 3 Rochester Wick; Height 32 in. over all; Height of Fount 11 in., Capacity 1 Gallon, Burns 12 Hours with One Filling . $6 00
Open Stock; Net Weight 7 Lbs. Each

No. 20N—Size 2, Complete; Nickel Plated Fount with Harp and 15 in. Corrugated Tin Reflector, Bright Inside, Blue Outside, No. 2 Rochester Chimney, 2"x10 ½", No. 2 Rochester Wick, Height 29 in. over all; Height of Fount 8½ in., Capacity 3 Pints; Burns 8 Hours with One Filling..... $4 25

No. 20B—Polished Brass Fount with No. 3B Harp, otherwise same as Above. 3 50

Open Stock; Net Weight 4 Lbs. Each

HARP HANGING LAMPS

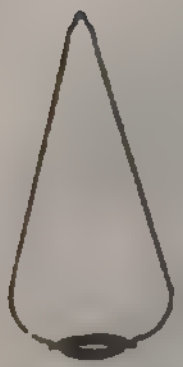
COMMON, No. 2 GLASS FOUNT

For Kitchen, Office and Camp Use

Per Dozen

No. 1—Complete, 1½ Pt. Glass Fount, No. 2 Burner, 1 in. Wick, No. 2 Sun Chimney, Japanned Harp; 15 in. Corrugated Tin Reflector, Bright Inside, Blue Outside; Height 24 in. over all. $9 00
Open Stock, Net Weight 34 Lbs. per Dozen

LAMP HARPS



FOR GLASS FOUNTS
Without Smoke Ball

Can also be used as a Hanging Flower Pot Bracket in Suspending Flowers from Ceiling or overhead fastening.

	Per Dozen
No. 610 Japanned Wire; Height 23 in., Ring 5 in. Diam.	$2 40

Half Dozen in a Package
Weight 9 Lbs. per Dozen

FOR TIN REFLECTORS

	Per Dozen
No. 3B—Polished Brass, for Size 3 Juno or Plumwood Founts and 20 in. Reflector, Length 28 in.	$6 60
No. 2B—Polished Brass, for Size 2 Juno or Plumwood Founts and 15 in. Reflector, Length 24 in.	6 00
No. 2NP—Nickel Plated Brass, otherwise as No. 2B	7 20

FOR STORE LAMPS
With Ring and Smoke Bell

FOR DOME SHADES

	Per Dozen
No. 3BC—Polished Brass, for Size 3 Juno or Plumwood Founts and 14 in. Dome Shade, Length 29 in.	$7 80

Half Dozen in a Package, Weight about 18 Lbs. per Dozen

LAMP BRACKETS

SWINGING
Cast Iron French Bronzed Also Suitable for Flower Pots

	Per Dozen
No. 71—Cap 5¼ in. Diam. at Top, 18 in. Projection, with Thumb Screw Attachment for Reflector	$4 20

Half Dozen in a Box; Weight 21 Lbs. per Dozen

LAMP TRIPODS

FOR LAMP SHADES
Fits No. 2 Miller or Juno, 2⅝ in. Burner and Supports 10 in. Dome Shade

	Per Dozen
No. 2—Polished Brass.	$2.00

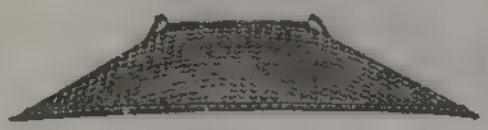
One Dozen in a Box; Weight 1 Lb. per Dozen

LAMP REFLECTORS AND SHADES

SILVERED GLASS REFLECTORS
With Wall and Bracket Fasteners

Diam., In.	7	8	9	10
Weight Lbs., Boxed	12	15	17	20
Per Dozen	$6 00	7 00	8.00	9.25

Open Stock



CORRUGATED TIN
Bright Inside, Blue Lacquered Outside, Imitation Wire Edges, Solid Lugs

	Per Dozen
No. 15—15 in., for Size 2 Juno and Common Lamps	$3 60

Weight 8 Lbs. per Dozen

No. 20—20 in., for Size 3 Juno and Plumwood Lamps	4 80

Weight 16 Lbs. per Dozen
One Dozen in a Package

OPAL GLASS, PLAIN DOME

	Per Dozen
No. 10—10 in., White, for Size 2 Juno Parlor Lamps	$6 60

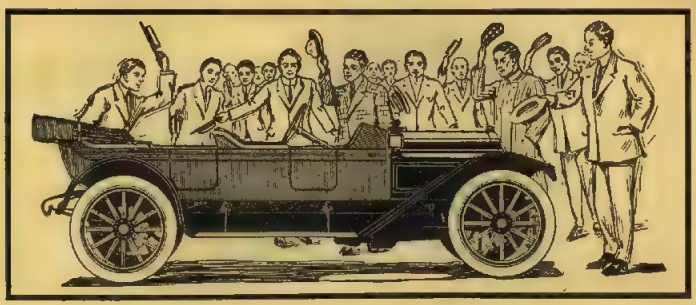
Weight 16 Lbs. per Dozen

No. 14—14 in., White, for Size 3 Swinging Lamps, Harp No. 3BC	9 00

Weight 25 Lbs. per Dozen

No. 10G—10 in., Green, for Size 2 Juno Parlor Lamp	10 00

The Harps, Brackets and Shades shown above will fit not only our Lamps but any make, where measurements correspond to size shown.



AGENTS

of ALL makes of cars take their hats off to the

Nyberg

THEY have got to recognize Nyberg superiority. Nyberg cars *command* respect. Competing agents know that to pit their car against a Nyberg—point for point—means to submit it to one of the most exacting tests conceivable.

Such a test can have but one result—victory for the Nyberg agent.

And there's a reason. There are no "inflated values" in Nyberg cars. Every dollar of their price is represented in real, car value. Nyberg buyers get quality throughout—the motors, transmissions, axles and every mechanical part are the finest money can buy.

Works for the Agent by Selling Itself—and STAYING Sold

Run a Nyberg alongside any average car selling for half as much again Compare them detail for detail—scrupulously, from tires to top Compare the appearance, the ease of control, the accessibility. Compare motors, transmission, wheels, bodies.

The Deadly Parallel will convince you the Nyberg has no equal within hundreds of dollars of its price.

Fictitious prices don't fool a motor-wise public any longer, Nyberg cars are commonsense cars selling at a commonsense price Sound dollar-for-dollar value is what they offer. *That is the prime reason they are self selling—and stay sold.* Furthermore, every Nyberg on the road is a silent salesman working *for* the Nyberg agent not *against* him.

Thousands of people in your vicinity are now ready to buy a motor car. Fortunes are made in supplying the demand with the right car at the right price.

The advantages of handling Nyberg cars are that they cover a cost range which conforms to the demands of *all classes of users.* You are not limited to one circumscribed group of buyers, as is the man with a one-car agency. Anyone on the market for any kind of car, from a rakish roadster to a dependable delivery wagon, is a Nyberg prospect

Already our capacity for 1913 is dangerously near to being oversold. Because of a change in selling policy, however, whereby we are desirous of distributing our 1913 product over a larger radius, a certain allotment of cars is being withheld subject to the option of *new* dealers. Here is your opportunity Large capital is unnecessary. We are ready to do immediate business Let us get together now. Read the next three pages, then *act.* Fill in the dealers' coupon—send it to us special delivery, or telegraph us. Applications attended to in the order received.

Nyberg Four-40

SPECIFICATIONS

Motor: Four-cylinder Rutenber motor, 4¼" x 5¼"; offset cylinders, enclosed valves, unit power plant and 3-point suspension. **Transmission:** 3 speeds forward and reverse. Shafts mounted on annular ball bearings. **Clutch:** Multiple disc variety. Raybestos against steel, running in oil or dry, as desired. **Final Drive:** Has two universal joints enclosed and packed in oil. **Rear Axle:** Full-floating, with pressed steel housing. Annular ball bearings used throughout, guaranteed against wear for two years. **Wheel Base:** Roadster and 5-Passenger Touring Car, 118 inches; Tourabout and 7-Passenger Touring Car, 126 inches. **Tires:** 36 x 4 inches on all models except 7-Passenger Touring Car, which has 37x4½ inch tires. **Equipment:** Demountable rims, 5 lamps, gas tank, pump, tools, jack, horn, and tire repair outfit. Extra equipment $100 additional. Self-starter, $20 extra.

$1450 *4¼x5¼ 40-horsepower Rutenber Motor, Unit Power Plant, Warner Transmission, Spicer Universal Joints, 118-inch Wheel Base, 36x4 Inch Tires.*

THE Nyberg Four-40 is the car that bridges the price gap between the model Four-37 at $1295 and Models Six-45 and Six-60. It has all the good points found in the larger models. Almost the only difference is it contains a smaller motor, and does not boast as many of the non-essential "extras"—little luxuries—found in the handsomely appointed Six-45 and Six-60.

A Straight From the Shoulder Talk to Agents

Has it ever occurred to you why agents don't make money? *It's because they get the wrong car—the car they thought was all right, but wasn't.*

They may sell plenty of cars the first year, then comes motor trouble, transmission trouble, axle trouble, carburetor trouble, and *trouble due to the fact the customer found out he paid too much for his car.* That is a combination no agent can buck—and make money. Every customer is a dissatisfied customer. Hundreds of prospects they might have sold with a right car soon know it. Their reputation is at a discount—their business a failure.

The man who gets a Nyberg agency gets no pig in a poke. He goes into the automobile business with his eyes open, knowing that *the varnish and upholstery on a Nyberg conceal nothing but quality.* He knows that a good motor, like the Rutenber, can never go wrong. He knows that a good transmission like a Warner, a good carburetor like a Schebler, a good rear axle like a Hess—are insurance against trouble. *He knows that every one of these parts, made by specialists, is a selling point—and will drive sales home.*

He knows that every Nyberg car that passes out of his hands is backed by a *double protective guarantee*—the guarantee of the part manufacturer and the guarantee of the Nyberg Automobile Works—with over twelve years of automobile experience as an asset. And he knows if Nyberg cars, in their individual parts and as a whole, were not so well made, were not to be positively relied upon in long periods of service, *they could not profitably be guaranteed.*

These are a few reasons a Nyberg agency is a business proposition—not a speculation. Nyberg agents build for the future. Remember if you don't sell the Nyberg you've got to compete with it. *And you can't afford to have as your competitor an agent for the Nyberg line.*

WE ARE GOING TO HELP YOU SELL NYBERG CARS

These four pages are but a part of a National advertising campaign which will create a nation-wide demand it's up to you to supply. Thousands of people in your territory have been holding out—waiting for just such a car as the Nyberg. *The car so right, the price so right, and the backing so right.* This vast business is *yours* for the asking. *Now* is the time to *act.* Tear off the attached coupon, fill it in and send it to us today.

COUPON

Nyberg Automobile Works,
Anderson, Indiana

Gentlemen: I desire further information concerning Nyberg cars.

Name . . . . . .

Address . . . . . .

. . . . . .

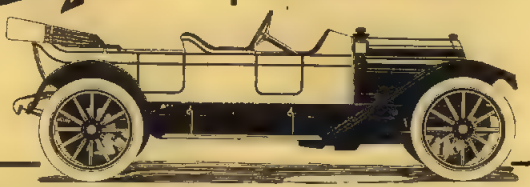
I am thinking of buying a car. ○
I am thinking of selling cars. ○
Mark thus +

Nyberg Automobile Works

ANDERSON, INDIANA

Southern Factory—Chattanooga, Tenn. Chicago Office—2427-2436 Michigan Ave.

Nyberg SIX -45 -60



SPECIFICATIONS
Nyberg Six-60

Motor: Six-cylinder Ruteaber, 4½" x 5¾"; offset cylinders, enclosed valves, unit power plant, and 3-point suspension. **Transmission:** Selective type sliding gear with 3 speeds forward and reverse. **Clutch:** Multiple disc, Raybestos against steel, running dry or in oil, as desired. **Final Drive:** 2 large enclosed universal joints, running in oil. **Rear Axle:** Full-floating, with pressed steel housing. Annular ball bearings used throughout. **Wheel Base:** 2-Passenger Roadster and 5-Passenger Touring Car, 126 inches 4-Passenger Tourabout and 7-Passenger Touring Car, 134 inches. **Tires:** 36 x 4 inches on all models except 7 Passenger Touring Car, which has 37 x 4½-inch tires. **Equipment:** Demountable rims, 5 lamps, gas tank, tools, jack, horn, pump and tire repair outfit. Extra equipment, $100 additional.

Nyberg Six-45

Motor: Six-cylinder, 3⅝"x5". All other specifications same as Model Six-60

$1750—$2000

ALL touring cars with four real doors; inside control; 6-cylinder self-starting long-stroke motors; three-quarter elliptic springs, very long and easy riding; large, roomy bodies, with soft cushions; all working parts of car enclosed, eliminating all noise and vibration of the engine. Built along straight distinctive lines of the utmost beauty.

Dealers! You've Got to Meet the 1913 Demand FOR "Sixes" WITH "Sixes"

You can't sell a man a "Four" if he *insists* on a "Six." The whole trend of automobile advancement points to 1913 as the big year of six-cylinder long-stroke motors. What was considered in 1912 as more or less of an experiment has now become an accepted feature in motor car construction.

The man who knows most about motor cars best appreciates the unlimited measure of value offered him in Nyberg "Sixes."

The Nyberg "Six-45" and "Six-60" models are both of the same general design, the "Six-60" merely being proportionately larger. Extreme care has been taken in designing these cars to obtain grace, luxury and balance of lines. Both cars contain all the good points common to the whole line of Nyberg cars.

Sixes Which Bear Positive Proof to the Value of Specialization

The manufacturers of Nyberg cars believe that to do anything extremely well, you have got to center on that thing to the exclusion of everything else,—*you have got to specialize. Every important part in Nyberg construction is made by master specialists*—Nyberg "Sixes" carry the highest grade six-cylinder motor specialists can produce a Rutenber, with long stroke, offset cylinders cast separately and made of the best grade of gray iron, all working parts enclosed, making it the smoothest, most silent running motor on the market. *Its makers stake their reputation on it by guaranteeing it for life.* All models have unit power plant with three-point suspension.

The full-floating rear axle is made by a concern, recognized the world over as an authority on axle construction—The Hess Spring and Axle Company, established in business for over thirty-five years.

The axle is formed of one piece, encased in a pressed steel housing, equipped with annular ball bearings throughout, guaranteed against wear for two years.

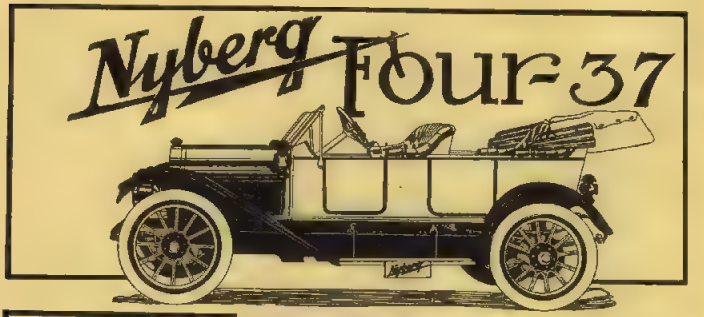
The Warner transmission, the Schebler carburetor, the Remy magneto, and the springs used, are all made by specialists, *acknowledged leaders in their respective lines.*

The message specialization carries to car-owners, as well as to dealers, is in the nature of a DOUBLE GUARANTEE, the guarantee of the specialist who manufactured each important part, and the further guarantee of the Nyberg Automobile Works.

EVERY PURCHASER OF A NYBERG CAR IS *DOUBLY PROTECTED.*

Dealers. The advantage of a complete line of Nyberg cars is that you can sell a man either a "Four" or a "Six" in any style, within a wide range of prices.

Nyberg Four-37



SPECIFICATIONS

Motor: Four-cylinder Rutenber motor 3¼x5½, offset cylinders, enclosed valves, unit power plant and 3-point suspension. **Transmission:** 3 speeds forward and reverse. Shafts mounted on annular ball bearings. **Clutch:** Multiple disc variety, Raybestos against steel, running in oil or dry, as desired. **Final Drive:** Has two universal joints enclosed and packed in oil. **Rear Axle:** Full-floating with pressed steel housing. Annular ball bearings used throughout, guaranteed against wear for two years. **Wheel Base:** 118 inches. **Tires:** 34"x4". **Equipment:** Top, glass front, Prest-O-Lite tank, five lamps, pump, tools, jack, horn and tire repair outfit.

$1295 FULLY EQUIPPED

The Car Competition Said Was "Impossible"

$1295.00 for a completely equipped five-passenger 37-horsepower Touring Car! A four-cylinder, long-stroke Rutenber motor, unit power plant, full-floating rear axle with pressed-steel housing, a Warner transmission, Spicer universal joints, Schebler carburetor, a Remy magneto, 118-inch wheel base and 34x4 inch tires—all combined in one car selling at the unheard of price of $1295.00! Do you wonder competition threw up its hands and cried: "It can't be done!" Do you wonder that the appearance of this car created such an uproar in the camp of cars selling at watered prices? Truly it was hot shot! *The old Fallacy that Big Price was an infallible indication of Big Value was blown to bits.*

And the Nyberg Four-37 is as handsome a car as you will meet in a day's drive. As much taste is expressed in its outward appearance as judgment is displayed under its hood in its chassis construction. Comfortable seating capacity, silence in operation, ease of control, generous wheel base—all cater to the enjoyment of the driver and passengers.

The Car For Which There is a Universal Demand

$1,295.00 is the price limit to-day of more buyers looking for high-class cars than any other. The so-called muddle classes that considered an automobile a luxury five years ago, today regard it almost an economic necessity. Farmers who once attempted legislation against it, today are prepared to boom the motor market. They could get cars for less than $1,295.00 if they wanted them, *but they are vest-pocket models, and a man can't take pride in an undersized car that looks less value than he paid for it.* What the rank-and-file have really been waiting for is a high-class "regular" car at a reasonable price. In the Nyberg they have it. If you are one of the waiting thousands interested in a car of such unprecedented value, tear out the coupon on the last page and mail it to us for more complete information.

Dealers: The Nyberg Four-37 opens to you a virgin field, the field of the rank-and-file, never before entered by a strictly high-class car at the right price. There is absolutely no limit to your possibilities.

The profits lie where no one else has been. Opportunity knocks!

1913 Here's the Complete Line of Nyberg Cars for 1913

Nyberg Six-60		Nyberg Six-45		Nyberg Four-40	
Two-Passenger Roadster,	$2000.00	Two-Passenger Roadster	$1700.00	Two-Passenger Roadster	$1400.00
Four-Passenger Tourabout	2000.00	Four-Passenger Tourabout	1750.00	Four-Passenger Tourabout	1450.00
Five-Passenger Touring Car	2000.00	Five-Passenger Touring Car	1750.00	Five-Passenger Touring Car	1450.00
Seven-Passenger Touring Car	2100.00	Seven-Passenger Touring Car	1850.00	Seven-Passenger Touring Car	1650.00

FOUR-37—Five-Passenger Touring Car, $1295

Limousines, Landaulets, and Coupes to be had in most models. Rutenber motors used exclusively with exception of one, 3¾ x 5.

Send for complete descriptive literature of Nyberg cars, supplied on four chassis in eight different body styles. Use the coupon on the last page.

PLANE IRONS

In Ordering Plane Irons for any Plane, please state the Number of Plane for which wanted

ZENITH, FOR IRON AND WOOD PLANES

Imported Knife Steel, Polished; Perfectly Tempered, Ground and Honed

No. Z1—SINGLE OR CUT IRONS

Cut, Inches	1⅝	1¾	2	2¼	2⅜	2⅝
Weight Dozen, Lbs	4	5	6	7½	7½	9
Each	$0.33	.35	.40	.45	.45	.50

No. Z2—DOUBLE IRONS

Cut, Inches	1⅝	1¾	2	2¼	2⅜	2⅝
Weight Doz., Lbs.	7	8	9½	11	12	13¼
Each	$0.55	.60	.65	.75	.75	.80

Half Dozen in Package

STANLEY

The Cut Shows a Plane Iron with Cap Screw fastened just back of Circular Opening in the Slot and in position for using the Iron.

Shows a Plane Iron with Cap Screw moved to back end of slot, in position for sharpening the Iron, without removing the Cap.

BAILEY PATENT IMPROVED

Best Quality English Cast Steel, Perfectly Tempered, Polished, Ground and Honed

No. 1—SINGLE IRONS

For Bailey Iron and Wood Planes

Cut, In.	1¾	2	2⅛	2¼	2⅜	2⅝
Weight Dozen, Lbs	2¼	3¼	3½	4	4¼	4½
*Each	$0.23	.25	.27	.28	.29	.32

No. 2—DOUBLE IRONS

For Bailey Iron Planes, Only

Cut, In	1¾	2	2¼	2⅜
Weight Dozen, Lbs.	4½	5½	7¼	7½
*Each	$0.38	.42	.47	.48

Irons for Stanley Planes, other than Block, Bed Rock and Stanley Wood Plane Double Irons will be ordered Special. These Irons are not interchangeable with any other make of Planes

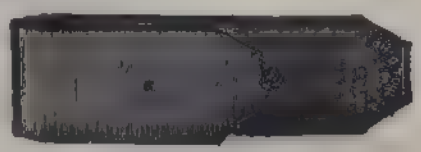
BLOCK PLANE IRONS

	Per Dozen
Bailey Planes, Nos. 9½, 9¾, 15, 16, 17, 18, 19, 60, 65	$2 35
For Stanley Planes, Nos. 102 and 103	1 25
For Stanley Planes, Nos. 110 and 130	1 85
For Stanley Planes, No. 220	2 35
For Stanley Planes, No. 100	75

EXTRA CAPS

	Per Dozen
For Stanley Planes, Nos. 102, 103, 110, 120, 130, 220	$1 75
For Bailey Planes, Nos. 9½, 9¾, 15 and 15½	1 75
	Each
For Bailey Planes, Nos. 16, 17, 60 and 65	$0 15
For Bailey Planes, Nos. 18 and 19	20

Half Dozen in a Box



AMERICAN

Extra Quality Cast Steel; Perfectly Tempered, Ground and Honed; Upper Part Natural Finish, Polished Bit. These Irons will fit any common Wood Bench Planes

No. 3—SINGLE OR CUT IRONS

Cut, Inches	1⅞	2	2⅛	2¼	2⅜	2½	3
Weight Dozen, Lbs.	5	6	6½	7⅛	7½	9	10½
Each	$0.25	.26	.28	.31	.34	.38	.58

No. 4—DOUBLE IRONS

Cut, Inches	1⅞	2	2⅛	2¼	2⅜	2½	2⅝	2¾	3
Weight Doz., Lbs	8½	9½	10¼	11	12	12¾	13¼	14	14¾
Each	$0.52	.54	.55	.58	.62	.68	.75	.85	.98

Half Dozen in a Package

OHIO WOOD PLANES

DOUBLE IRONS, BLACK START

SMOOTH

Auburn No. 3; Ohio No. 3; Sandusky No. 3; Chapin No. 112

	Each
No. 3W—8 in. Long, Assorted 2, 2⅛ and 2¼ in. Cut	$0 90

Average Weight 2 Lbs. Each

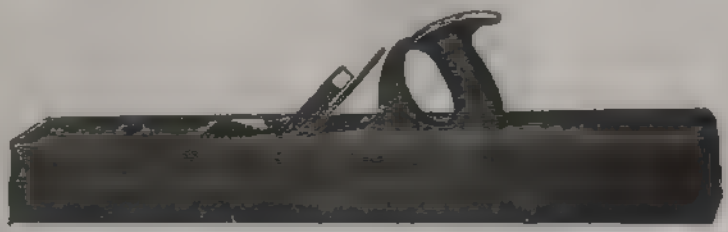
JACK

Auburn No. 12; Ohio No. 15; Sandusky No. 13; Chapin No. 113

	Each
No. 15W—16 in. Long, Assorted 2, 2⅛, and 2¼ in. Cut	$1 00

Average Weight 4½ Lbs. Each

Open Stock



DOUBLE IRONS, BLACK START

FORE

Auburn No. 20, Ohio No. 21 Sandusky No. 19; Chapin No. 114

	Each
No. 21W—22 in. Long, Assorted 2⅜, 2½ and 2⅝ in. Cut	$1 70

Average Weight 8 Lbs. Each

No. 27W—JOINTER

Auburn No. 30 and 31; Ohio No. 27, Sandusky No. 25, Chapin No. 115

	Each
26 in. Long, Assorted 2⅛, 2⅜ and 2⅝ in. Cut	$1 80
28 in. Long, Assorted 2⅛, 2⅜ and 2¾ in. Cut	1 90

Average Weight 7 Lbs. Each

Open Stock

Cut Shows No. 47

TOOTH

For Scratching and Roughing up boards to give the glue a firm hold for Veneering

Auburn No. 190; Ohio No. 30; Sandusky No 36; Chapin No. 430

	Each
No. 30W—7 in. Long Single Iron, 2 in. Cut	$1.00

Weight 1½ Lbs. Each

No. 91W—NOSING STEP, WITH TWO IRONS

For Rounding the Edges of Steps, etc

Auburn No. 189; Ohio No. 91; Sandusky No. 113; Chapin No. 133

	Each
⅝, ⅞, 1, 1⅛ and 1¼ in. Cut	$1.10
1⅜ and 1½ in. Cut	1 20
1¾ and 2 in. Cut	1.50

Average Weight 1½ Lbs. Each

Open Stock

Specify Size and Number in Ordering

DADO

For Grooving to Let in Shelving, etc.

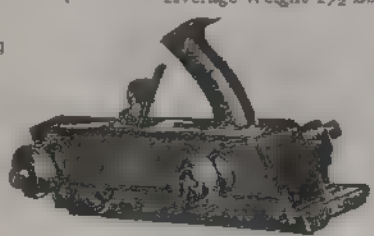
Auburn No. 176, Ohio No. 47, Sandusky No. 60; Chapin No. 138

	Each
No. 47W—With Iron Side Stop, ¼, ½, ¾, ⅞ and 1 in. Cut	$1 10

Auburn No. 177; Ohio No. 48; Sandusky No. 62, Chapin No. 139

No. 48W—With Brass Screw Stop, ⅜, ½, ⅝, ¾, ⅞ and 1 in. Cut	1 50

Average Weight 1½ Lbs. Each



FILLETSTER

For Rabbeting, where accurate depth and width are required, Regulated by a Stop and Fence

Auburn No. 121, Ohio No. 55, Sandusky No. 69; Chapin No. 150

	Each
No. 55W—With Brass Screw Stop, Boxed; 9½ in. Long, 1½ in. Cut	$2 50

Weight 2½ Lbs. Each

PLANK MATCH

For Grooving and Tonguing or Matching heavy work, such as Flooring, etc. The Tonguing Plane cuts the tongue and the Grooving Plane plows the groove

Auburn No. 81; Ohio No. 84, Sandusky No. 106½, Chapin No. 182

	Per Pair
No. 84W—One Each, Tongue and Groove Planes, with Screw arms, Plated	$4 00

Weight 7 Lbs. per Pair

All Above, Open Stock

OHIO FANCY WOOD PLANES

Made of Best Quality Second Growth Beech, all Parts Perfectly Fitted; Polished Bits, Ground and Honed

BOARD MATCHING PLANES IN PAIRS

For Tonguing and Grooving or Matching Boards of any description, the Tonguing Plane cuts the Tongue and the Grooving Plane Plows the Groove

Cuts Show Style of One Pair No. 76

WITHOUT HANDLES

No. 75—NOT PLATED

Auburn No. 69, Ohio No. 75, Sandusky No. 99, Chapin No. 171

	Per Pair
9½ in. Long; ⅛, ½, ⅝, ¾, ⅞ and 1 in. Cut	$1.50
9½ in. Long; 1¼ in. Cut	2.00

Average Weight 2¼ Lbs. per Pair

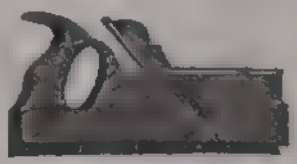
PLATED

Auburn No. 70, Ohio No. 76, Sandusky No. 100, Chapin No. 172

	Per Pair
No. 76—Has Steel Plates at Sides of Groove and Tongue; Length 9½ in. Long; ½, ¾, ⅞ and 1 in. Cut	$1.75

Average Weight 2¼ Lbs. per Pair

One Pair in a Package



WITH SOLID HANDLE

Auburn No. 74; Ohio No. 78, Sandusky No. 102; Chapin No. 176

	Per Pair
No. 78—Has Steel Plate at Side of Groove and Tongue; 11 in. Long, Assorted ⅛, ¾, ⅞ and 1 in. Cut; Average Weight 2¾ Lbs. per Pair.	$2.50

One Pair in a Package

RABBET PLANES

Cut Shows No. 119

Used for Forming Rabbets on Door Jambs, Etc., to Secure a Tight Joint

No. 116—SKEW RABBET

Auburn No. 181; Ohio No. 116, Sandusky No. 146; Chapin No. 187

For Working in Corners and Cramped Places

Width Cut, In.	½, ⅝, ¾, ⅞, 1	1⅛	1¼	1½	1¾	2
Weight Each, Lbs.	1	1	1¼	1½	1¾	2
Each	$0.60	.65	.65	.70	.80	.90

JACK RABBET

For Heavier Work, where a Long Plane is needed

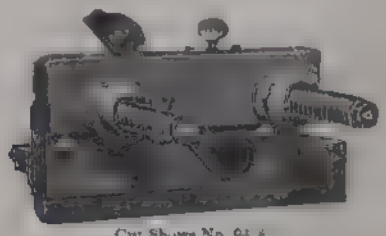
Auburn No. 51, Ohio No. 119; Sandusky No. 149; Chapin No. 160

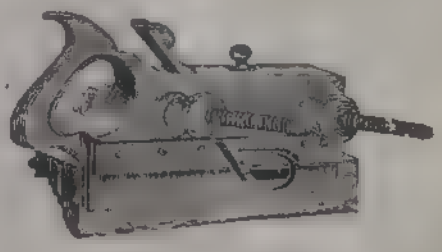
	Each
No. 119—With Center Handle, Two Cutters, Width of Cut 1¼, 1⅝, 1⅞ in.	$1.70
Auburn No. 53, Ohio No. 119½, Sandusky No. 149, Chapin No. 159	
No. 119½—With Side Handle and Cutters, Width of Cut 1¼, 1⅝, 1⅞ in.	1.80

Average Weight 2½ Lbs. Each.

One in a Package

PANEL PLOWS





Cut Shows No. 94½

Adjustable, Complete with Eight Irons; Used for Grooving for Different Thicknesses of Panels

WITHOUT HANDLE

Auburn No. 88; Ohio No. 94½

	Each
No. 94½—Wood Stop, Applewood Screw Arms	$5.00

Auburn No. 89, Ohio No. 95, Sandusky No. 117, Chapin No. 232

No. 95—Screw Stop, Applewood Screw Arms	5.50

HANDLED

Auburn No. 90; Ohio No. 96½; Sandusky No. 119; Chapin No. 234

	Each
No. 96½—Screw Stop, with Applewood Screw Arms	$6.50

Auburn No. 92; Ohio No. 100; Sandusky No. 123; Chapin No. 236

No. 100—Screw Stop, with Boxwood Screw Arms	7.75

Auburn No. 96, Ohio No. 104, Sandusky No. 132, Chapin No. 240½

No. 104—Screw Stop, all Boxwood, with screw Arms	10.00

All, One in a Package; Average Weight 3 to 4 Lbs. Each

FANCY WOOD PLANES

First Quality Second Growth Beech Body; Best Grade Steel Cutters, Polished, Tempered, Ground and Honed; Wooden Wedges

In Ordering Half Pairs of Hollows and Rounds be careful to give Number of Plane and whether Hollow or Round. Hollows leave the Wood Round, Rounds leave the Wood Hollow. They are used for Rounding Corners and Smoothing Hollows. A Full Set is 9 Pairs.

No. 72—HOLLOWS AND ROUNDS IN PAIRS

Auburn No. 180; Ohio No. 72; Sandusky No. 92; Chapin No. 163

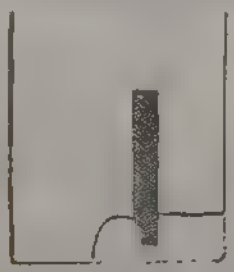
Size Nos.	2	4	6	8	10	12	14	16	18
Size Inches	¼	⅜	½	⅝	¾	⅞	1	1¼	1½
Weight Per Pair Lbs.	1¼	1¼	1½	1½	2	2½	2¼	2½	2¾
Per Pair	$1.00	1.00	1.00	1.00	1.00	1.00	1.15	1.15	1.35

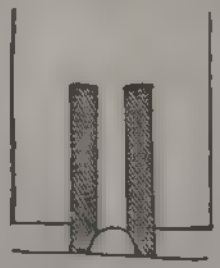
HOLLOWS AND ROUNDS IN SETS

Per Set of 9 Pairs

Set No. 72S—Consists of 9 Pairs, One Pair Each of Size Nos. 2 to 18 ..... $9 45

One Pair in a Package; Weight 16½ Lbs. per Set





BEADING PLANES

For Cutting a Bead on Lumber, such as Wainscoting, Etc.

No. 37—SIDE BEAD, SINGLE BOXED

Auburn No. 105; Ohio No. 37 Sandusky No. 47, Chapin No. 123

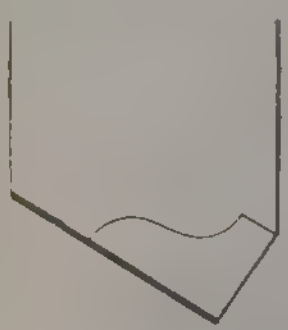
	Each
Width of Cut ¼, ⅜, ⅜, ½ in.; Weight 1 Lb.	$0 50
Width of Cut ⅝, ¾ in.; Weight 1¼ Lbs.	.55
Width of Cut ⅞, 1 in.; Weight 1½ Lbs.	.70

No. 41—CENTER BEAD, DOUBLE BOXED

Auburn No. 108; Ohio No. 41, Sandusky No. 51, Chapin No. 126

	Each
Width of Cut ¼, ⅜, ⅜, ½ in.; Weight 1 Lb.	$0 60
Width of Cut ⅝, ¾ in., Weight 1¼ Lbs.	.65
Width of Cut ⅞, 1 in.; Weight 1½ Lbs.	.80

One in a Package



OGEE PLANES

For Cutting Special Mouldings; Exactly the Reverse of the Face of Plane

No. 62—REVERSE

Auburn No. 127; Ohio No. 62 Sandusky No. 81; Chapin No. 206

	Each
Width of Cut ⅜, ½, ⅝, ¾, ⅞, 1 in.	$0 75
Average Weight 1½ Lbs. Each	
Width of Cut 1¼, 1½ in.	.85
Average Weight 2 Lbs. Each	

No. 62½—ROMAN REVERSE

Auburn No. 126 Ohio No. 62½, Sandusky No. 82

	Each
Width of Cut ¾, ⅞, 1 in.	$0 75
Average Weight 1 Lb. Each	
Width of Cut ¾, ⅞, 1 in.	.85
Average Weight 1¼ Lbs. Each	
Width of Cut 1¼, 1½ in.	1 00
Average Weight 2 Lbs. Each	

No. 62¼—ROMAN REVERSE, WITH FENCE

Auburn No. 126½; Ohio No. 62¼ Sandusky No. 82½; Chapin No. 207½

	Each
Width of Cut ¾, ⅞, 1 in.	$0 80
Average Weight 1 Lb. Each	
Width of Cut ¾, ⅞, 1 in.	.90
Average Weight 1¼ Lbs. Each	
Width of Cut 1¼, 1½ in.	1 05
Weight 1½ Lbs. Each	
Width of Cut 1¾, 2 in.	1 20
Weight 2 Lbs. Each	

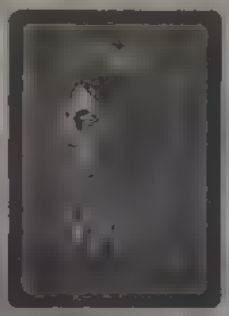
One in a Package

In Ordering, Specify both Number and Size

PLAYING CARDS

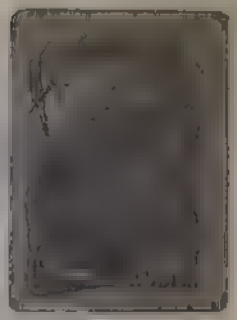
No. 605B Dutch Maid

No. 606C [illegible] Canyon


No. 606D Sitting Bull

No. 606E Geisha

No. 606F Marion


No. 606G Captain Kidd

ASSORTED PACKS

Per Carton Six Packs

No. 606A—Congress Assortment. Each of the following Backs: Stag, Lily, Chink, Rookwood, Priscilla, Persian, Key, nameled in beautiful rich Colors, Gilt Edges, put up in a Handsome Box which can be used on the Counter as a Display Easel $3.00

Weight 2 Lbs. per Carton

CONGRESS, Gold Edges [illegible] and Taking Designs, Especially [illegible] ished in any of Above Backs; Each Pack in a Slide Cover Box $6.00

Half Dozen Packs in a Carton; Weight 4 Lbs. per Dozen

No. 808R—Rider

No. 808E—Expert

No. 808F—Fan

No. 808S—Snowflake

BICYCLE, Ivory Finish, High Enameled [illegible] and Wearing Quality, Peculiar to Themselves, Each Pack in a Neat Tuck Case $3.00

One Dozen Packs in a Carton; Weight [illegible]

APOLLO, Base Ball Back

RAMBLER, Hindoo Back

PICKET, Octopus Back

STEAMBOAT, Bruce Back

Per Doz. Packs

No. 33 Enameled [illegible] Backs, [illegible] Tuck in a Hard Gold Tuck Case $3.00

Per Doz. Packs

No. 29 Enameled, [illegible] Backs, each Pack in a Tuck Case $2.75

Per Doz. Packs

No. 55 Hindoo Pictures [illegible] $2.00

Per Doz. Packs

No. 999 Medium Fast Finish, [illegible] Pocket Tuck Case $1.20

One Dozen in a Carton, Weight about 3½ Lbs. per Dozen.

PAINE DUPLICATE WHIST TRAYS

Size 7x7 [illegible] For Duplicate Whist Play [illegible] insert [illegible] they cannot [illegible]

Per Set

No. 8 8-Tray [illegible] $ .90
No. 12 12-Tray [illegible] 1.00
No. 16 16-Tray [illegible] 1.10

Per Set, Nos. 8 [illegible] with Instructions

POKER CHIPS

Made [illegible] ness; Finely Finished Edges, Unless otherwise Ordered All are packed 50 White, 25 Red and 25 Blue, in each Box of 100

[illegible] Engraved [illegible] per 100

No. 011, Per [illegible] $ .75
No. 011½ Engraved [illegible] .90

Weight 2½ Lbs. per 100

ROW BOATS

Not Carried in Stock, Sold for Direct Shipment from Near-by Wisconsin Factory

DOUBLE ENDER

Showing the Lines of 13 and 15 ft. Double Ender

Seating Arrangement of 13 ft. Special

Seating Arrangement of 15 ft. Special

The Special Double Ender is designed for all general purposes, it combines the most serviceable features desired in a fishing or livery boat, with the lowest possible cost for a good article. At the same time the ease of rowing and the attractive or graceful features are not lost sight of. Built in two grades and two sizes

Specifications

GRADE B

Oak Frame, Cedar Planking, fastened with best quality Clout and Wrought Iron Screws throughout, put together in workmanlike manner; Nickel Plated Fittings, Steel Stem Band and Painter Ring. The Three Top Strakes, Gunwales, Breast Hooks and Seats finished in Oil and best Marine Varnish; balance of Boat painted with Three Coats of Lead Paint. One Pair Ash Oars, Locks and Pins. Oil Finished.

Nos.	3332A	3332B
Length, Feet	13	15
Beam Amidship, In.	42	42
Depth Amidship, In.	13	14
Depth at Ends, In.	20	21
Shipping Weight, Lbs.	115	125
Each	$30.00	36.00

GRADE C

Galvanized Iron Fittings, Painter Ring, Stem Band and Oar Locks. Ash Oars, Painted and Feathered; Boat painted inside and out with three Coats best Lead Paint. Gunwales and Seats Finished in Natural Wood, contrasting nicely with balance of finish. Otherwise same as Grade B.

Nos.	3332C	3332D
Length, Feet.	13	15
Beam Amidship, In.	42	42
Depth Amidship, In.	14	14
Depth at Ends, In.	20	21
Shipping Weight, Lbs.	115	125
Each	$26.70	33.35

All 13 Foot Boats are equipped with Three Seats, One Pair of Oar Locks and One Pair of Ash Oars
All 15 Foot Boats are equipped with Four Seats, Two Pairs of Oar Locks and One Pair of Ash Oars

SPECIAL, SQUARE STERN

Especially Built for Boat Livery, Hotels and Summer Resorts; has the same graceful lines and handsome appearance as our other boats and is unexcelled for the price; two grades and four sizes

Specifications

GRADE B

Entire Frame, Selected White Oak, Cedar Planking, Oak Trimmings, Nickel Plated Fittings, Steel Stem Band and Painter Ring, One Pair Straight Ash Oars, Locks and Pins. Oil Finished, Three Top Strakes, Gunwales, Breast Hooks and Seats finished in Oil and best Marine Varnish; balance of Boat painted three coats best Lead Paint.

Nos.	3332E	3332H	3332K	3332L
Length, Feet	13	14	15	16
Beam Amidship, In.	40	42	42	46
Depth Forward, In.	22	23	24	25
Depth Amidship, In.	14	14½	15	16
Depth Aft, In.	19	20	20	21
Shipping Weight, Lbs.	120	135	150	175
Each	$33.35	36.70	43.35	46.70

GRADE C

Painted all Over, Inside and Out, Gunwales and Seats finished natural in Marine Varnish. Galvanized Iron Fittings, One Pair Varnished Ash Oars, Otherwise same as Grade B

Nos.	3332N	3332P	3332R	3332T
Length, Feet.	13	14	15	16
Beam Amidship, In.	40	42	42	46
Depth Forward, In.	22	23	24	25
Depth Amidship, In.	14	14½	15	16
Depth Aft, In.	19	20	20	21
Shipping Weight, Lbs.	120	135	150	175
Each	$30.00	33.35	40.00	43.35

All 13 Foot Boats are equipped with Three Seats, One Pair of Oar Locks and others have Four Seats and Two Pairs of Oar Locks
One Pair of Ash Oars is included with every Boat

Rudders furnished for Any Style Row Boat at $1.35 Each, Extra

ROW BOATS

Not Carried in Stock, Sold for Direct Shipment from Near-by Wisconsin Factory

FAMILY, SQUARE STERN

Showing Interior Finish and Seating Arrangement

Family Square Stern Row Boats are built in two grades and three sizes, and like all our Square Stern Boats, combine beauty, graceful lines, lightness, durability and easy rowing qualities, with absolute safety and seaworthiness. The moderate price makes it an Ideal Boat for Summer Resort and Livery business.

Specifications

GRADE B

Keel, Stem, Stern Post, Ribs and Cross Seats of Cedar; Nickel Plated Fittings, Steel Stern Bar, One Pair Straight Spruce Oars, Painted inside and out on the bottom. Three Upper Strakes, Gunwales and Seats finished in Natural Wood with best Marine Varnish.

Nos.	3333B	3333C
Length, Feet	15	16
Beam Amidship, In.	46	48
Depth Forward, In.	24	25
Depth Amidship, In.	15	16
Depth Aft, In.	20	21
Shipping Weight, Lbs.	160	175
Each	$43.35	46.70

GRADE C

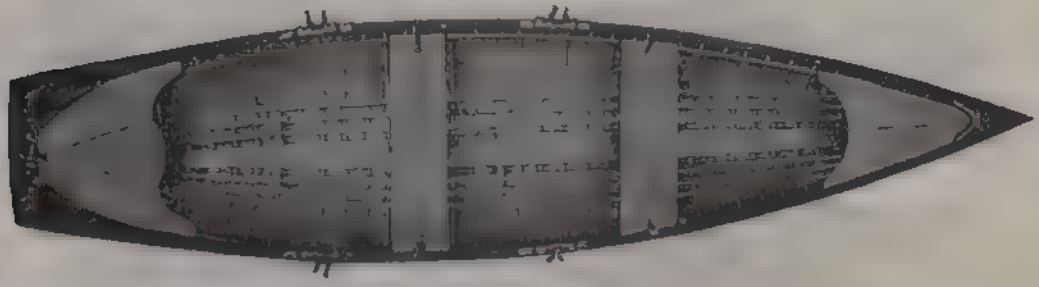
Galvanized Iron Fittings, Malleable Oar Locks, One Pair Straight Ash Oars, Body Strakes Painted Inside and Out with three Coats best Lead Color, Gunwales and Seats finished in Natural Wood, making a neat contrast, otherwise same as Grade B.

Nos.	3333E	3333F
Length, Feet	15	16
Beam Amidship, In.	46	48
Depth Forward, In.	24	25
Depth Amidship, In.	15	16
Depth Aft, In.	20	21
Shipping Weight, Lbs.	160	175
Each	$40.00	43.35

All Boats are Equipped with Four Seats and Two Pairs of Oar Locks

STANDARD, SQUARE STERN

Exterior Lines Showing Square Stern Boat



Interior Finish and Seating Arrangement of Standard Square Stern Boat

Our Standard Square Stern Row Boats are built in three grades and five sizes. These boats are celebrated for their beauty and grace of model, and combine safety, lightness and durability

Specifications

Grade A—Keel, Stem, Stern Post and Ribs best white Oak, Half Round Oak Rubbers, Oak Gunwales and Breast Hooks, Clear White Cedar Planking, Fastenings, Copper Coat Nails and Brass Screws, Nickel Plated Oar Locks, Seat Hangers, Stem Band and Painter Ring, One Pair of Straight Spruce Oars for 13 and 14 Foot, Two Pairs for 15, 16 and 18 Foot Boats, entire Boat finished inside and out, in natural wood with Oil and best Marine Varnish.

GRADE A

Nos.	3333G	3333H	3333J	3333K	3333L
Length, Feet	13	14	15	16	18
Beam Amidship, In.	40	42	42	46	47
Depth Forward, In.	22	23	24	25	25
Depth Amidship, In.	14	14½	15	16	16
Depth Aft, In.	19	20	20½	21	21
Shipping Weight, Lbs.	120	130	140	150	170
Each	$46.70	50.00	50.00	55.70	80.00

All 13 Foot Boats are Equipped with Three Seats and One Pair Oar Locks, All others have Four Seats and Two Pairs of Oar Locks
Rudders furnished for Any Style Row Boat at $1.35 Each Extra

BOATS AND CANOES

Not Carried in Stock. Sold for Direct Shipment from Near-by Wisconsin Factory

This Manufacturers' Line of Boats comprises Gasoline and Steam Launches, Sailing Yachts, Yawls, Row Boats, Fish Boats, Duck Boats and Canoes. We are able to show here only a few of the leaders, but will be glad to mail a complete special Catalog of Pleasure Boats upon application and offer Factory Prices on Special Agency basis.

DUCK BOATS

Designed to meet the demand for an exceptionally cheap but at the same time a strong, safe and durable boat. The body is [illegible] Decks, ribs, braces and trimmings of hardwood, the whole painted three coats, dry grass color, has a removable seat, one pair six-foot oars, [illegible] foot push-paddle, all painted same color as boat, a galvanized steel tube passes down through forward and after decks, making a socket [illegible] way to anchor, it is built so that galvanized steel air tanks may be put under both forward and after decks, and when supplied with these tanks, [illegible] anteed to sustain 500 Lbs. weight, when full of water, making the boat practically non-sinkable. The Still Hunter has the following [illegible] It is Light Weight, weighing only eighty pounds, with a carrying capacity of six hundred pounds. It is Light Draft, drawing from three to four inches when fairly loaded. It is Very Stiff, one can shoot with ease, while standing. It is Very Still, a point appreciated by the hunter.

No. 3334A Marshall-Wells Hardware Co.'s Still Hunter, Length 12 ft.; Width Beam 36 in., Depth Under Deck 6½ in.; Size Cockpit 20 in. by 6½ ft.; with Paddle, Oars, Oarlocks and Removable Seat; Weight 80 Lbs. Each $24.00

No. 3334B—Fitted with Galvanized Steel Air Tanks; otherwise same as Above 26.00

CANVAS COVERED CANOES

An improvement on the Celebrated Pearson and Peterborough Models, the floor is very flat for stability and quick turning in rapid water, also low draft over shallow bars, has good rubber bumper to the sides, the combination making a safe, quick and easy paddling boat. In this Canoe are combined great Stiffness, and Strength with Lightness, Easy Paddling Qualities and Absolute Freedom from Leaks. Built in one grade and five sizes.

Specifications—Stem, White Oak; Ribs, Steam-Bent, Clear White Cedar, reaching from Gunwale to Gunwale; Planking, White Cedar, ⅛ in. Thick, fastened to Ribs with Copper Nails; Breasthook, Ash or Cherry; Gunwales, Yellow Pine, Red Cypress or Ash; Canvas Cover in one piece, filled and finished, last two Coats with Canvas Enamel; Thwarts, Gunwales and whole inside natural finished with Best Spar Varnish.

	Length, Ft.	Width Beam, In.	Depth Amidship, In.	Capacity, Lbs.	Shipping Wt., Lbs.	Each
No. 3334K	14	32	12	750	55	$33.35
No. 3334L	15	32	12	900	60	36.70
No. 3334N	16	32	12	1050	65	40.00
No. 3334P	17	32	13	1200	70	43.00
No. 3334R	18	32	13	1350	75	46.00

Prices do not include Cane Seats shown in above Cut. They will be furnished at $2.00 Extra per Seat

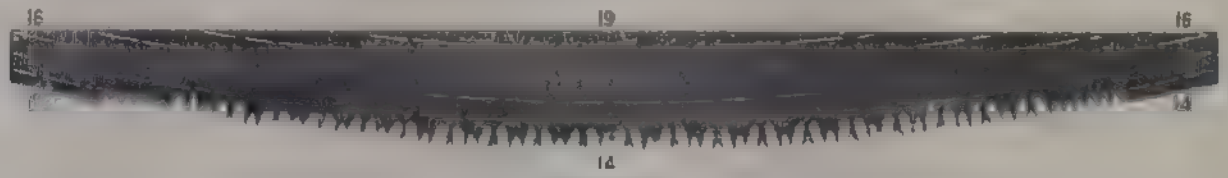
One Spruce Paddle with Each Canoe

SIMONDS CROSS CUT SAWS

CRESCENT GROUND

A Perfect Saw for Hard or Soft Wood. Made of Crucible Cast Steel, Five Gauges Thinner on Back than on Points

The Blade is ground on Crescent Lines, Parallel to the Cutting Edge as shown in the illustration below, which gives the proper thickness through out the entire length of saw, while the Points are Two Gauges in thickness. In consequence the Saw can be ground much thinner on the Back, and will not bind in the Kerf. Requires less Set, as each Tooth does an equal amount of work and has equal Thickness or Strength. Set is not required for Center Bearing Saws. Handles and consequently Set Teeth at the ends, the operators can Push as well as Pull without causing it to Buckle.



No. 13—CHAMPION TOOTH

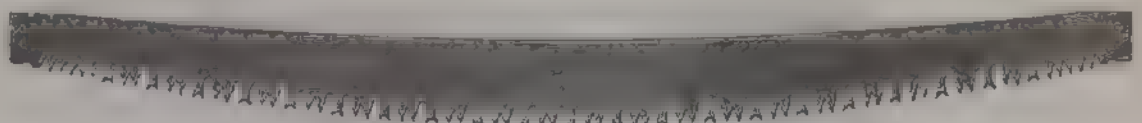
14 Gauge at Cutting Edge, 16 Gauge at Ends on Back of Saw, 19 Gauge at Center of Back Edge, Two Cutting Teeth to Each Raker
This Style of Tooth is very Easy to File and Keep in Order and is the Old Reliable Favorite with the Loggers

Length, Feet.	4½	5	5½	6	6½	7
Weight, Each, Lbs.	4¾	4½	5¼	7¾	8½	9¾
Each, without Handles.	$3.60	4.30	5.10	5.90	6.80	7.80

No. 22—PERFORATED LANCE TOOTH

14 Gauge at Tooth Edge, 16 Gauge at Ends on Back of Saw, 19 Gauge at Center of Back Edge. Four Cutting Teeth to Each Raker
This, with Deep Gullets, makes an Easy Running Fast Cutting, Long Lived Saw and a General Favorite with Experienced Woodsmen and Sawyers

Length, Feet.	4½	5	5½	6	6½	7
Weight, Each, Lbs.	4¾	4½	5¼	7¾	8½	9¾
Each, without Handles.	$3.60	4.30	5.10	5.90	6.80	7.80



No. 113—TUTTLE TOOTH, NARROW BLADE FELLING

No Wedge required to keep Saw from pinching or binding in the kerf. Has Two Cutting Teeth to each Raker. Thin Back, Narrow Blade, of High Grade steel and Tough Temper, equally suitable to Large or Small Timber, Hard or Soft Wood and correctly adapted for either Summer or Winter Logging. This Saw is Standard among the most critical Loggers of the Northwest, is readily sold and is easily kept in order.

Length, Feet.	5	5½	6	6½
Gauge at Tooth Edge.	15	15	14	14
Gauge at Back Edge.	20	20	19	19
Width at Center, In. (all 3⅜ in. at Ends)	5⅞	5⅞	5¾	5¾
Weight Each, Lbs	4	4¾	5¼	6¼
Each, without Handles.	$4.30	5.10	5.90	6.80

All Above are Open Stock

HOW TO FIT UP A CROSS-CUT SAW

The Tools Necessary for Fitting up a Saw are a Hammer, Raker Tooth Gauge, Side File, Setting Block, Set Gauge, and a Smooth Mill Bastard File. In Fitting a Saw the Teeth should first be Jointed or made Uniform in length, for this use the 8-inch Mill File and pass it lightly over the Points, lengthwise of the Saw until the Points are all touched. Then place the Joint Gauge over the Back Edge and File them down to the Gauge which should be about 1/32 inch shorter than the Cutting Teeth. To Set the Teeth, lay the Setting Block on a log with a file beveled to receive it, or on the end of a block of wood, laying the Saw flat on it so the point of the tooth projects fully ¼ inch over the apex of the Bevel or Surface. Give it two or three strokes with a light hammer on the Sides of the Tooth over the Apex, fully ¼ inch from the point, which will give the required Set. Regulate the Set with the Tooth Gauge. The Side File should be used lightly over the Teeth to remove the Burr, as Heavy Filing of the Sides affects the way in which the Saw is Set when new and always Set in the same manner. Various Styles of Teeth are Designed to meet the views of different Sawyers.

ONE MAN CROSS CUT SAWS

MARSWELLS

Marswells One Man Saws are Arc Ground, with [illegible] that the Blade [illegible] Arc Crescent lines parallel to the Cutting Edge, giving a thin Back in the center to prevent Binding. These Saws are [illegible], which distinguish Marswells One Man Saws from all previous page.

All have Beech Handles, Brass Screws and Beech Supplementary Top Handle.

No. 312—MARSWELLS CHAMPION TOOTH

Skew Back; 16 Gauge at Cutting Edge, 18 Gauge at Back Edge; two Cutting Teeth to each Raker

Length, Ft	3	3½	4	4½	5
[illegible]	4	4½	5	6	7
[illegible]	$2.25	2.60	3.00	3.35	3.70

No. 323 –MARSWELLS PERFORATED LANCE TOOTH

Skew Back; 14 Gauge at Cutting Edge, 17 Gauge at Back Edge; Four Cutting Teeth to Each Raker; Extra Large Handle allows use of Mittens.

Length, Feet	3½	4	4½
Weight, Lbs.	4½	5	5¾
Each	$3.50	4.00	4.50

No. 324—MARSWELLS PERFORATED LANCE TOOTH

Skew Back; 15 Gauge at Cutting Edge, 17 Gauge at Back Edge, Two Cutting Teeth to each Raker; Extra Large Handle allows use of Mittens.

Length, Feet	3	3½	4	4½	5	5½
Weight, Lbs.	3	3¾	4¼	5	6	6½
Each	$2.40	2.80	3.20	3.60	4.00	4.40

MARSWELLS CEDAR QUEEN, REX TOOTH

Skew Back; Especially for sawing Cedar Trees and for Ties, Poles, etc. 15 Gauge at Cutting Edge, 17 Gauge at Back Edge; Two Cutting Teeth to Each Raker.

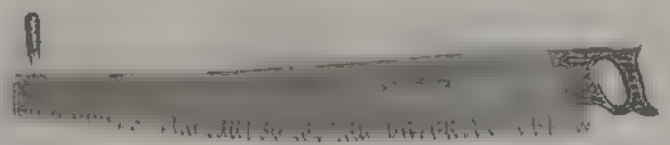
Length, Feet	3½	4	4½
Weight, Lbs.	3½	4½	6
Each	$2.80	3.20	3.60

SIMONDS

No. 112—SIMONDS, CHAMPION TOOTH

Skew Back; 16 Gauge at Cutting Edge; 18 Gauge at Back Edge; two Cutting Teeth to Each Raker.

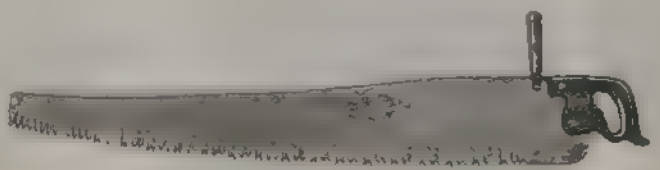
Length, Feet	3	3½	4	4½	5
Weight, Lbs.	4	4½	5	6	7
Each	$2.25	2.60	3.00	3.35	3.70



No. 223—SIMONDS MONARCH, PERFORATED LANCE TOOTH

Skew Back; 14 Gauge at Cutting Edge, 17 Gauge at Back Edge, Four Cutting Teeth to Each Raker.

Length, Feet	3½	4	4½
Weight, Lbs.	4½	5	5¾
Each	$3.50	4.00	4.50

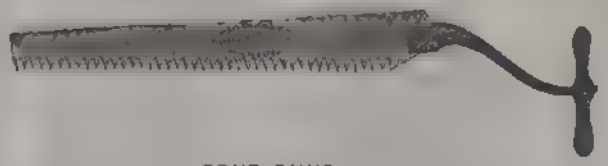


No. 224—SIMONDS, PERFORATED LANCE TOOTH

Skew Back; 15 Gauge at Cutting Edge, 17 Gauge at Back Edge; Two Cutting Teeth to each Raker.

Length, Feet	3	3½	4	4½	5	5½
Weight, Lbs.	3	3¾	4¼	5	6	6½
Each	$2.40	2.80	3.20	3.60	4.00	4.40

ICE SAWS



POND SAWS

11 Gauge Crucible Steel; 7 in. Butt Tapered to 5 in.

Length Blade, Ft.	5	5½
Weight, Lbs.	10	11
Each, without Handle	$4.25	4.70

HAND ICE SAWS

	Per Dozen
Great American Tooth, 25 in., No. 11 Gauge Steel, Japanned Iron Handle; Weight 48 Lbs. per Doz.	$31.00

For Other Ice Tools See Pages 1139 to 1144

PIT SAWS

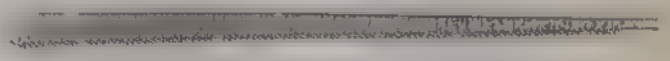
MARSWELLS PIT SAWS

For use by two men where one has to work down in a Pit; for Ripping Purposes Only.

Best Quality Saw Steel, Tempered, Polished and Etched

Length Feet	5½	6	6½
Width, In.	10⅞ to 9⅛	10½ to 8¾	10⅛ to 8⅜
Weight, Each, Lbs.	13	14	17¾
Each, without Handles	$5.50	6.00	6.50

WHIP SAWS



MARSWELLS WHIP SAWS

Generally used in Ship Yards for Sawing out Knees.

Best Quality Saw Steel, Tempered, Polished and Etched.

Length, Feet	5½	6	6½
Width, In.	4¼ to 1¾	4½ to 1⅝	4¾ to 2
Weight, Each, Lbs.	3	4	5
Each, without Handle	$3.30	3.60	3.90

PIT SAW BOX HANDLES

	Each
No. 18. 18 in. Hickory Handle, 10 in. Wedge. Weight 13¼ Lbs. Each	$0.80

PIT, WHIP AND ICE SAW HANDLES

	Each
No. 19. Iron Filler, 19 in. Long; Beech Handle 15 in. Long; Weight 3¼ Lbs. Each	$1.10

All Above, Open Stock

CROSS CUT SAW HANDLES

SIMONDS

Per Pair

No. 6—Malleable Iron Loop, Screws into threaded Ferrule at bottom. Extra Strong, Hardwood Handle; 10 in. Long. Weight 2¼ Lbs. per Pair. $0 75

50 Pairs in a Case

Weight 135 Lbs. per Case

DISSTON

Per Pair

No. 122—Heavy Malleable Iron Cap with long Neck tapped to fit the threaded end of Loop Rod; this Rod extends through the Handle, making the connection and line of pressure when Saw is in use, Handle to better edge of Blade, giving a firm grip without wobbling. Hardwood Handle, 10 in. long, weight 2 Lbs. per Pair .. $0 50

Open Stock

ATKINS

Per Pair

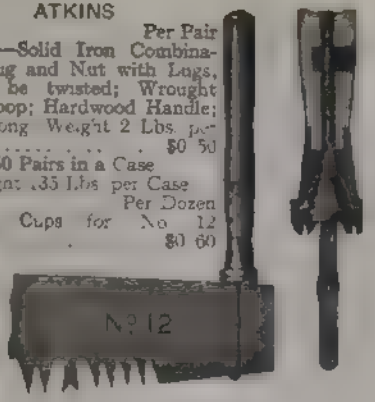
No. 12—Solid Iron Combination Plug and Nut with Lugs, cannot be twisted; Wrought Steel Loop; Hardwood Handle; 10 in. long. Weight 2 Lbs. per Pair.. . . . . $0 50

50 Pairs in a Case

Weight 135 Lbs per Case

Per Dozen

Extra Cups for No. 12 Handle . $0 60



DISSTON

Per Pair

No. 109—Malleable Iron Loop Rod, Inside Nut and Ferrule, Selected Hardwood Handle, 10½ in. Long. Weight 2 Lbs. per Pair. $0.39

50 Pairs in a Barrel

Weight 135 Lbs. per Barrel

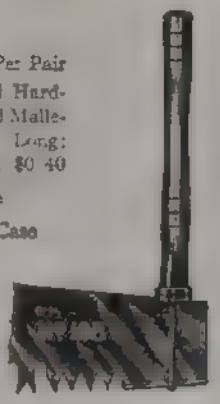
ATKINS

Per Pair

No. 108—Extra Selected Hardwood Handle, Galvanized Malleable Iron Loop, 10 in. Long; Weight 2 Lbs. per Pair. $0 40

50 Pairs in a Case

Weight 135 Lbs. per Case



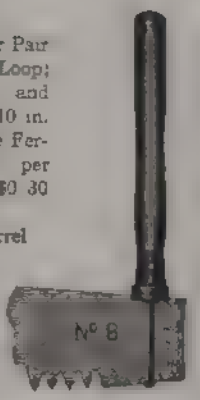
Our Best Seller

Per Pair

No. 8—Wrought Steel Loop; Iron combination Plug and Nut Hardwood Handle, 10 in. long, Varnished, Malleable Ferrule; Weight 2 Lbs per Pair $0 30

100 Pairs in a Barrel

Weight 200 Lbs. per Barrel



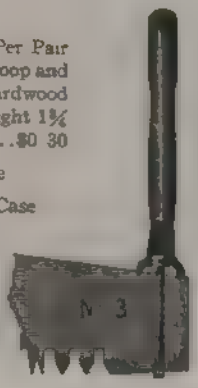
ATKINS

Per Pair

No. 3—Malleable Iron Loop and Cuff; Patent Swivel; Hardwood Handle, 10 in. long; Weight 1¾ Lbs. per Pair. $0 30

50 Pairs in a Case

Weight 135 Lbs. per Case



ATKINS WESTERN PATTERN

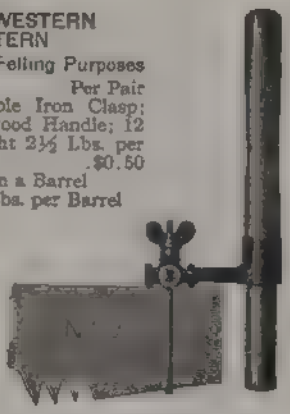
Reversible for Felling Purposes

Per Pair

No. 9—Malleable Iron Clasp; Selected Hardwood Handle; 12 in. Long; Weight 2½ Lbs. per Pair.. . . . $0.50

50 Pairs in a Barrel

Weight 135 Lbs. per Barrel



ATKINS REVERSIBLE

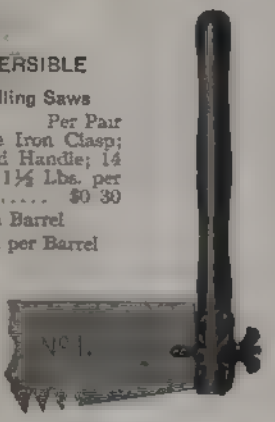
For Narrow Felling Saws

Per Pair

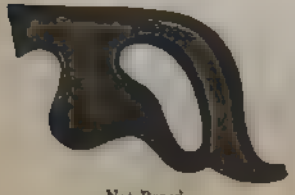
No. 11—Malleable Iron Clasp; Selected Hardwood Handle; 14 in. Long; Weight 1½ Lbs. per Pair. $0 30

75 Pairs in a Barrel

Weight 140 Lbs. per Barrel



ONE MAN SAW HANDLES



Not Bored

Per Dozen

No. 15—One Man Cross Cut Handle; Beechwood, Varnished Edges; Not Bored; Adapted to any make of Saw, Size 6x8 in. . $3.75

One Dozen in a Box

Weight 7 Lbs per Dozen

Per Dozen

No. 20—Supplementary Top Handle; Varnished Beechwood, Malleable Ferrule and Clamp; Adapted to any make of Saw; Length 6 in. .$2 00

Half Dozen in a Box, Weight 4 Lbs. per Dozen

CONCRETE MACHINERY

For Direct Shipment from Nearby Wisconsin Factory

DRAIN AND SEWER TILE MOULDS

Concrete is the most logical and the best material that possibly can be found for drain tile and sewer pipes. It becomes harder year after year and will last practically forever. It does not disintegrate or crack and peel the same as clay or burned tile. Any workman can make up these tiles at a cost below that of clay tiles. The mould consists of an outer and inner shell together with a top and bottom ring. The expansion core is such that when the mould is finished it can be readily taken off. The expansion core is made of [illegible] back of the inner shell being made of high carbon steel with expanding [illegible] that the core is furnished with a modern up-to-date expanding device. It is now made with a hand wheel and gears. When the wheel is turned down and the gears forced out, the sides force the core expanding the core. This is the most even device that is known and works just as well on a 4 ft. surface as it does in a 4 ft. surface.

	Thickness of Wall	Length	Weight	Each
No. 331—Drain and Sewer Tile Mould with 6 in. Core	1 in.	12 in.	45 Lbs.	$11 40
No. 332—Drain and Sewer Tile Mould with 8 in. Core	1¼ in.	14 in.	65 Lbs.	11 70
No. 333—Drain and Sewer Tile Mould with 10 in. Core	1¼ in.	16 in.	95 Lbs.	15 21
No. 334—Drain and Sewer Tile Mould with 12 in. Core	1⅜ in.	18 in.	125 Lbs.	16 20
No. 335—Drain and Sewer Tile Mould with 14 in. Core	1½ in.	20 in.	155 Lbs.	18.00

BEVEL AND TONGUE ATTACHMENTS

BEVEL AND TONGUE ATTACHMENTS FOR ABOVE MOULD

The illustration shows tile made using the Bevel and Tongue Attachments. It has the advantage over bell end tile, in that it uses less material and [illegible] if desired can be cemented together to form a continuous pipe. In using the Attachments only one Top Ring is necessary, but we would suggest that [illegible] Rings be ordered as the bottom rings should be left on the tiles for 24 hours after [illegible] be about a day's run.

BEVEL OR TOP RINGS

	Diameter	Weight	Each
No. 353	6 in.	2½ Lbs.	$0.90
No. 354	8 in.	3 Lbs.	.90
No. 356	10 in.	4 Lbs.	.99
No. 357	12 in.	5½ Lbs.	1.26
No. 358	14 in.	6 Lbs.	1 35

TONGUE OR BOTTOM RINGS

	Diameter	Weight	Each
No. 353A	6 in.	1½ Lbs.	$0 54
No. 354A	8 in.	2 Lbs.	.54
No. 356A	10 in.	4 Lbs.	.69
No. 357A	12 in.	5 Lbs.	.90
No. 358A	14 in.	6 Lbs.	.99

Note—We can furnish made to order smaller or larger sizes than listed above. Prices on application.

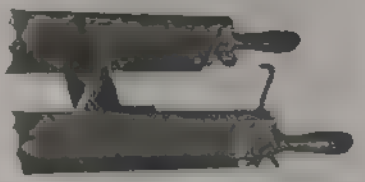
CONCRETE MACHINERY

For Direct Shipment from Near-by Wisconsin Factory

ADJUSTABLE FENCE POST MACHINERY

It moves like a Wheelbarrow

Showing Roller Bearing Front and Method of Adjustment



Notice the Handles for Moving and the Latch for Locking. Adjustment is by means of Screw Bolts

Scarcity of timber, short life of lumber and the heavy expense of replacing ordinary wood posts have increased the demand for concrete posts. No fence post machine ever designed will prove a better investment than this for the reason that it is adjustable to all sizes and only one mould has to be purchased to make the various sizes. Made with ¼ in. Steel Sides reinforced with heavy angle iron. It has a wheel head to which the sides are attached and several holes are provided so that these sides can be placed at different distances from each other in order to make posts of different sizes as may be desired. At the bottom are provided two handles and ordinary latch screws. To adjust the machine at the bottom it is simply necessary to tighten or loosen these screws and in this way the width of the post can be adjusted at the bottom to various sizes. The fact that this machine can be adjusted for lawn fence posts, field fence posts, both large and small, makes it an attractive proposition for farmers who undoubtedly would want to make different sizes of posts for different purposes. Top can be adjusted from 2½ to 4 in., and the bottom from 3½ in. to any desired width, and the length from 1 to 7½ ft. long. Corrugated posts or smooth posts can be made with the same machine. The inside of mould is smooth and the machine as ordinarily shipped would make smooth posts. At times a corrugated post may be better, especially where stock may work the wires up or down. In this case a corrugated strip can be furnished and by simply resting it against the inside a fence post of the corrugated type can be made in the same mould. The most economical and practical method of fastening the wire to the post is to loop wire around the post and fasten it to the fence or main wire at the sides of the post. If you desire to make posts with staples we can furnish a staple forming tool for making the staples. All that is necessary is to secure some copper or soft galvanized wire, cut it into small lengths and the staple forming tool will make the staples of the necessary shape and size.

PLAIN POST

You can make any kind of a top that you wish. A plain block is placed in the mould and this can be round, square, oval or any shape. Initial posts are sometimes made in this way, the initial being cut into the block.

	Each
No. 301—Adjustable Fence Post Mould Weight 137 Lbs. Each	$16.50
No. 302—Staple Forming Tool..... Weight 15 Lbs. Each	.84
No. 303—Plain Corrugating Strip.... Weight 25 Lbs. Each	1.50

CORRUGATED POST

CONCRETE MACHINERY

For Direct Shipment from Near-by Wisconsin Factory

ORNAMENTAL MOULDS

These moulds are all made in four sections and are suitable for either plaster or tamped cement. Extreme care is used in the construction so as to produce moulds of fine grain and clear cut designs. They are bored to templets and have hinge bolts permitting of drawing easily.

JARDINIERE MOULD

Fills the demand for a flower pot, which can be used for plants, nurseryman and florists uses of people, for house uses, porches, gardens, etc.

Each

No. 453—Height 14 in., Diameter 16 in. $18.75

LAWN VASE MOULD

This vase is artistically ornamented and is easy to make.

Each

No. 451—Height Over-all 33½ in., Outside Diameter of Bowl 16 in., Inside Diameter of Bowl 12 in., Depth of Bowl 8 in., Height of Base 15½ in., Size of Base 12 in. . $25 25

Weight 164 Lbs.

All cuts shown, excepting the Hitching Post Mould, do not show the Moulds themselves, but the finished article made with the Moulds.

LAWN VASE MOULD

This Vase Mould is the same as top section of Vase Mould No. 451 and is extensively used on lawns, flower beds, graves, etc.

Each

No. 452—Height Over-all 18 in., Outside Diameter of Bowl 16 in., Inside Diameter of Bowl 12 in., Depth of Bowl 8 in., Diameter of Base 11 in. $22 50

Weight 90 Lbs. Each

Balls add to the harmony and pleasing effect of concrete construction, and make very desirable ornaments for the tops of gate posts, newel ornamentations, etc.

PLAIN BALL MOULDS

No.	Size of Base, In.	Diam. of Ball, In.	Ht., In.	Wt., Lbs.	Each
443	2½	2½	4¼	2½	$ 1 84
444	3½	3½	6½	10	5 25
445	5	6	11	26	12 75
446	5	6	12	28	12 75
447	7	8	13	40	12 75
448	8	8	14	45	15 93
449	10	10	19	56	19 14
4410	12	12	24	70	21 66
4411	15	15	32½	150	25 50
4412	16	16	[illegible]	175	25 50
4413	18	18	34½	175	25 50

FANCY BALL MOULDS

No.	Size of Base, In.	Size of Ball, In.	Ht., In.	Wt., Lbs.	Each
441	12	9½	12	60	$10 50
442	14	11	14	75	15 00

HITCHING POST MOULDS

Posts made with this mould are very heavy. They are of artistic design and are not expensive to make, inasmuch as large stones can be placed in the body of the mould which adds weight but does not detract from the strength. Moulds are made in 4 sections of heavy gray iron castings. From above illustration you can see how [illegible] set with into the concrete. This [illegible] be made with rock bottom so that [illegible] shown. Sample Staple and [illegible] with each mould. This mould makes a hitching post 18 in. square at base and 3 ft. high, weight 400 Lbs.

Each

No. 321—Hitching Post Mould. . . . $30 00

Weight 150 Lbs. Each

CONCRETE MACHINERY

For Direct Shipment from Near-by Wisconsin Factory

PORCH COLUMN MOULDS

On this page are shown the separate moulds used in making different designs of porch column outfits. The designs are shown herewith to give a better idea of the way [illegible] outfits, which form the complete set. If different design than those specified is wanted it can be furnished without extra [illegible] Many combinations can be worked out when having this complete outfit.

PLAIN TOP RAILING — Each

4¾ in. High, 24 in. Long, 5 in. Wide

No. 381—Weight 40 Lbs. $8.40

EGG AND DART TOP RAILING — Each

4¾ in. High, 24 in. Long, 5 in. Wide

No. 381A—Weight 40 Lbs. $8.40

COLUMN MOULD

Makes Plain or Fluted Columns, 24 in. High

Each

No. 382—10 in., Weight 126 Lbs . . $12 60

No. 383—12 in., Weight 150 Lbs. . . . 18 60

O. G. PIER BASE

10 in., 5¾ in. High; Top 14 in. Bottom 17 in.

12 in., 5¾ in. High; Top 16 in., bottom 19 in. Each

No. 384—10 in., Weight 50 Lbs. . . . . $ 9 60

No. 385—12 in., Weight 70 Lbs. . . . 11 40

PIER BODY MOULD

For 10 in. Columns see p. 14 in. and for 12 in., 16 in. Pier—See prices and designs, page 826

IONIC CAPITAL — Each

No. 386—10 in. $12 00

No. 387—12 in. 14 40

EGG AND DART PIER CAP

10 in. 4¾ in. High, Top 17 in., Bottom 14 in. 12 in. 4¾ in. High; Top 19 in., Bottom 16 in. Each

No. 388—10 in., Weight 40 Lbs. $11 40

No. 389—12 in., Weight 50 Lbs. 13 20

FLUTING ATTACHMENT

For Column Mould Opposite

COLUMN MOULD

Plain or Fluted Design, 12 in. High

Each

No. 3810—10 in.; Weight 45 Lbs. $6 60

No. 3811—12 in.; Weight 65 Lbs. 9 36

RING MOULD — Each

No. 3816—10 in., Weight 27 Lbs. . . . $3 60

No. 3817—12 in., Weight 35 Lbs. . . . 4.80

GOTHIC CAPITAL — Each

No. 386A—10 in. $12.00

No. 387A—12 in. 14.40

PLAIN PIER CAP

Same Sizes as Egg and Dart Pier Mould

Each

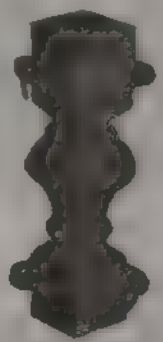
No. 388A—10 in.; Weight 40 Lbs. $11 40

No. 389B—12 in.; Weight 50 Lbs. 13 20

BOTTOM RAIL AND WATER SHED MOULDS — Each

5¾ in. High, 24 in. Long, 5 in. Wide

No. 3810A—Weight 40 Lbs. . . . $8 40



BALUSTER MOULD

17 in. High, 3 in. Diameter — Each

No. 3815—Weight 35 Lbs. . . . $9 75

Made in 4 Sections

O. G. COLUMN CAP AND BASE MOULD

10 in., 5¾ in. High; Top 14 in.

12 in., 5¾ in. High; Top 16 in. Each

No. 3812—10 in., Weight 50 Lbs. . . . $6 60

No. 3813—12 in., Weight 70 Lbs. . . . 7 20

Railing and Baluster Moulds are same size for either 10 or 12 inch Columns

Figures 10 in. and 12 in. at right of numbers refer to diameter of column shaft

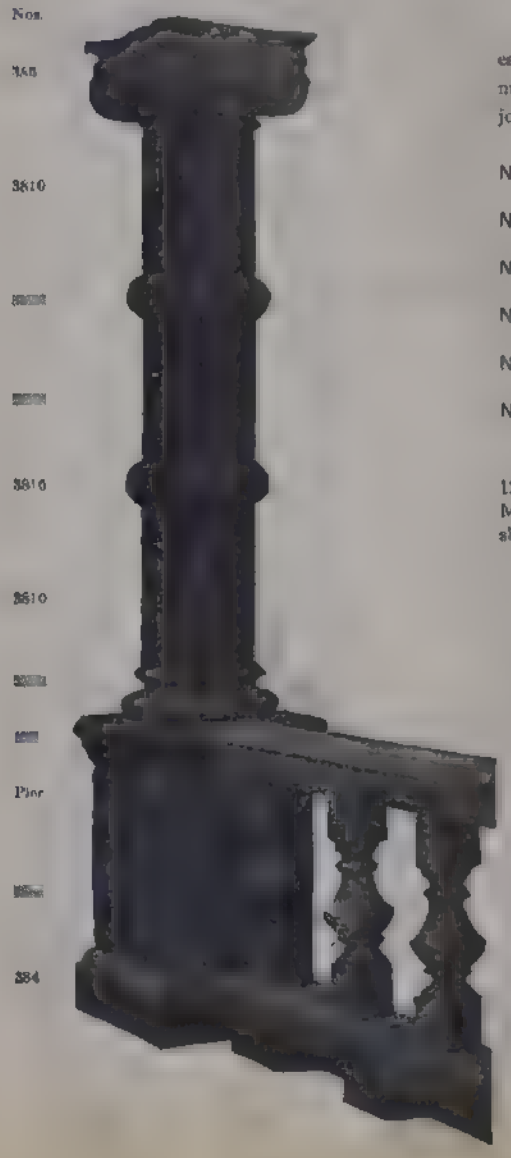
CONCRETE MACHINERY

For Direct Shipment from Near-by Wisconsin Factory

PORCH COLUMN OUTFITS

We illustrate below different Porch Column Outfits, the most attractive and up-to-date line of Ornamental Moulds made for such purposes. Opposite each mould is shown the number of the corresponding mould on the opposite page which goes to make up each set. These moulds are all made in sections, are deep cut and attractive in appearance, and any person of ordinary intelligence can make these with good results by giving a little care and attention to drawing away the different sections. The Porch Columns are made in sections and laid up and cemented together. We can furnish a book of instructions which tells how to get perfect imitation of cut stone. If other than rock face is desired for the Pier Body Mould, we can furnish Plain, Rock Panel, Tooled, Tooled Margin Rock; Tooled Margin Bushhammered or Cobblestone Rock will be furnished unless otherwise specified. The moulds all fit together neatly and when the joints are rubbed down with sandstone a perfect joint will result and the finished columns will be a source of pride and satisfaction both to the builder and the property owner.

The columns or shaft moulds shown on this page are 12 in. high. A mould 24 in. high which will make both plain and fluted shafts can be furnished by paying the difference in prices as shown on page 830. (See Nos. 382 and 3810.)

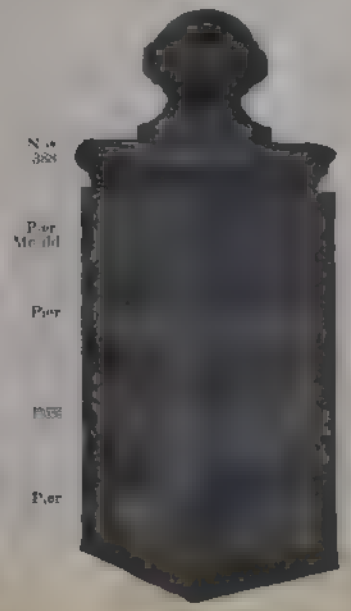


Outfit No. 1

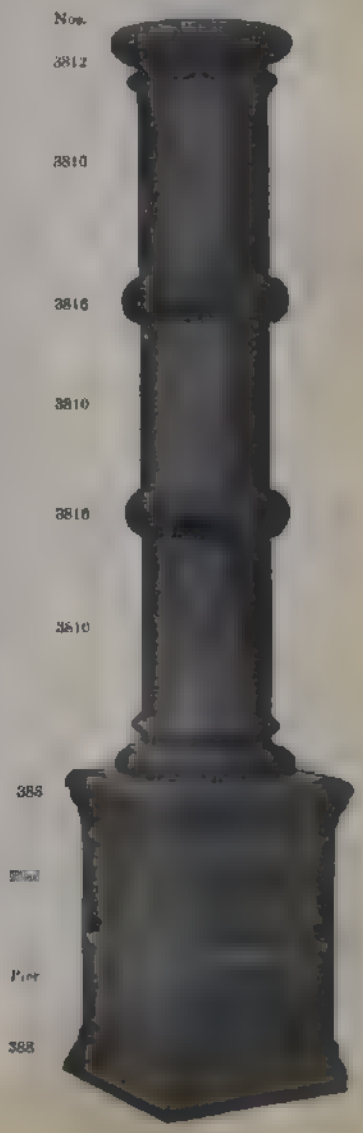
Complete instructions are furnished with each outfit, giving detailed information as to method of making concrete, curing, finishing joints, etc.

	Each
No. 401—Outfit No. 1, 10 in Shaft. .... Weight 570 Lbs. Each	$74 03
No. 402—Outfit No. 1, 12 in Shaft. ..... Weight 685 Lbs. Each	85 56
No. 403—Outfit No. 2, 14 in. Base. ..... Weight 150 Lbs. Each	24 00
No. 404—Outfit No. 2, 16 in. Base. ..... Weight 185 Lbs. Each	30 00
No. 405—Outfit No. 3, 10 in. Shaft..... Weight 225 Lbs. Each	31 56
No. 406—Outfit No. 3, 12 in. Shaft..... Weight 285 Lbs. Each	38 88

Note—10 in. Columns have 14 in. Piers; 12 in. Columns, 16 in. Piers. Any design Pier Mould can be furnished as listed under sizes shown on page 826.



Outfit No. 2



Outfit No. 3

Sterling Silver Deposit $\frac{999}{1000}$ Fine Glassware

An appropriate gift for any occasion.

Height, 6½ inches.

Height 4½ inches.

Sherry.
Height, 4⅛ ins.

Wine.
No. 3009 332.
Height, 3¾ ins.

Brandy
No. 3791/332.
Height, 2⅜ ins.

Footed Sherbet.
No. 3842
Height,

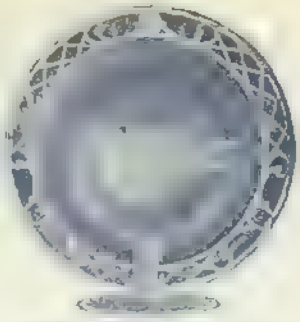


Plate
Height of cup 3⅛ inches, use of sherbet cup, 3 inches diameter of plate, 5⅛ inches

No. 3452/350.....Each $19.50
Height, 2¼ inches.

No. 3464/31
Height, 2⅛ inches.

Height, 11 inches.
No. 2300/213 1 pint.....Each $18.50
Height 9½
Whiskey tumblers to match.
No. 7600-313.....Per Doz. $23.50
Cordial glasses to match.
.....Per Doz. $25.75
Height, 3½ inches.

No. 3600/313.

Finger Bowl.
No. 3769/339.Each $3.50
4¼ inches

No. 3718 322.....Each $17.75
Height, 3¼ inches.
Diameter 6 inches.

Whiskey Bottle.
No. 3319/342.....Each $17.75
Height, 12 inches; capacity, 2 pints.
Whiskey tumblers to match
Height, 2¾ inches.
Highball tumblers to match
No. 3701/342.....Per Doz. $74.75
Height, 4⅝ inches.

Water Bottle
No. 3553, 350.....Each $21.50
Height, 8¾ inches; capacity, 2 pints.

No. 3858 343.

Whiskey Bottle.
No. 3722
Height
capacity, 2 pints.
Whiskey tumblers to match.
No. 2
Per Doz $37.50
Height 2¾ inches.
Highball tumblers to match
No. 2
Per Doz $55.50
Height, 4¾ inches.

STERLING SILVER DEPOSIT 999/1000 FINE GLASSWARE

The Latest and Most Artistic Designs on the Market. **Illustrations are Reduced Size**

No. 3005	384	5½ oz.	$6.25
No. 3004	384	4 oz.	5.50
No. 3003	384	3 oz.	5.75
No.			

C Large. Each
No. 3007 336 4 oz 4
No. 3006 336 3 oz

Cologne
Each
No. 3099 312 3 oz....$6.25

Set
height, 3½ inches
Per Set $3.75

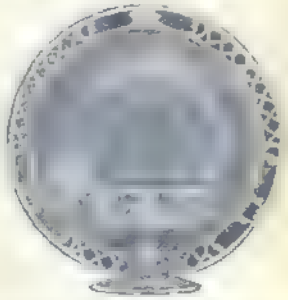
Sugar and Cream Set
Sugar height, 3 inches; creamer
inches.
.Per set $7.25

Candle Stick.
Height, 8 inches.
Base, 4¾ inches.
No. 3213 320. Each $

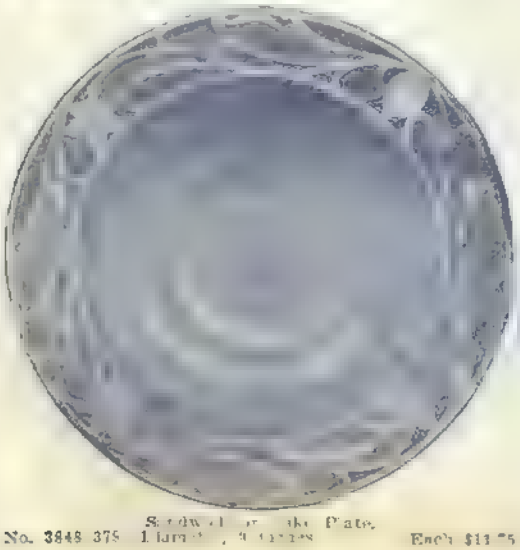
Candle Stick.
Height, 8 inches
Base, 4
.$10.75

Sugar and Cream Set.
Sugar height 3⅝ inches, cream height 4 inches.
Per set $10.75

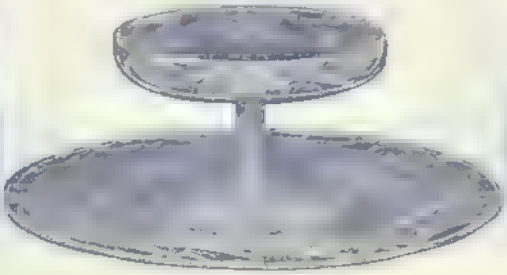
Cheese Plate and Cover
Diameter of plate, 8¼ inches.
Diameter of cover, 5½ inches.
Height, 5⅛ inches.
No. 3686 355 .....Each $21.50



Cheese plate
Per set
$1.50
No. 3737 332 Plate
Diameter of cheese,
Diameter of Plate, 5¼
Height 1⅜ inches.



Sandwich Plate.
No. 3848 378 Each $11.75



Sandwich Plate and Compote Set
No. 3848 378 and 3051 378 Complete, 2 piece set ..... Per set $19.00
Separate pieces as follows
No. 3848/378 Plate .....Each 11.75
No. 3051/378 Compote .....Each 7.25
Diameter of plate, 9 inches
Diameter of top, 5
Height of compote 3 inches

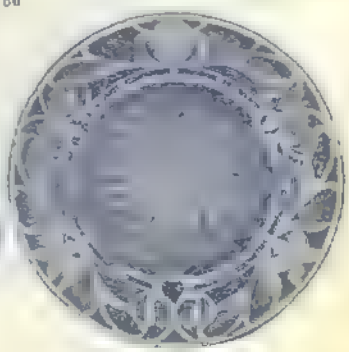


Plate or Platter
Each
No. 2000/359 5 inch....$ 6.25
No. 3000/359 6 inch.... 9.00
No. 3000/359 7 inch 10.75
No. 3001 359 8 14.50
No. 3001 359 10 inch 17.75

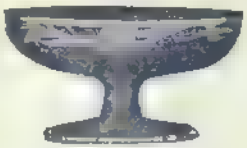
STERLING SILVER DEPOSIT 999/1000 FINE GLASSWARE

OUR LINE UNSURPASSED IN QUALITY AND PRICE.

NUT BOWL.
No. 3713/332 Each....$5.00
Height, 1¾ inches.
Diameter, 4¼ inches.

INDIVIDUAL NUT
No. 3863 332
Each ..... $ 50
Height, 1¾ in.
Diameter, 2½ in.

INDIVIDUAL NUT.
No. 3863/351
Each $1.75
Height, 1¾ in.
Diameter, 3½ in.



LOW COMPOTE.
No. 3803, 351 Each..$4.50
Height, 2¼ inches.
Diameter, 4¾ inches.

TOOTHPICK HOLDER.
No. 3991/332
Each $1.75
Height, 1⅞ inches.

TOOTHPICK HOLDER.
No. 3922 350
Each $1.75
Height, 2½ inches.

MARMALADE JAR.
No. 3733/350
Each $10.75
Height 4¾ inches.
Diameter, 4 inches.

CREAM OR SYRUP PITCHER.
No. 3712/350-L
Each $4.50
Height, 4 inches.
Capacity, ½ pint

HORSERADISH JAR.
No. 3664/312
Each $3.75
Height, 5¾ inches.

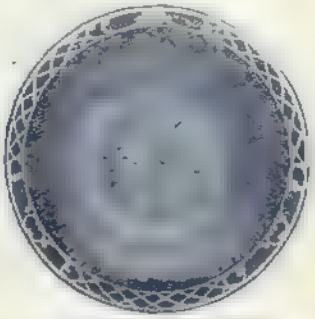
MUSTARD POT.
No. 3831/374
Each $6.25
Height, 3¾ inches.

INDIVIDUAL CREAM AND PLATE SET.
No. 3751/367 ,Per set $2 .
Cream, height, 3¾ inches
Diameter of plate, 4½ inches.

COASTER
No. 3107/000 Each.... ....$1.50
Diameter, 3½ inches.
Height, ⅝ inches.

No. 3693½ 332 COASTER
Each.....$2.50
Diameter, 4¾ inches.
Height, ⅝ inches.

PUFF BOX
No. 3666/347 Each.....$10.75
Height, 2⅝ inches.
Diameter, 4¼ inches.

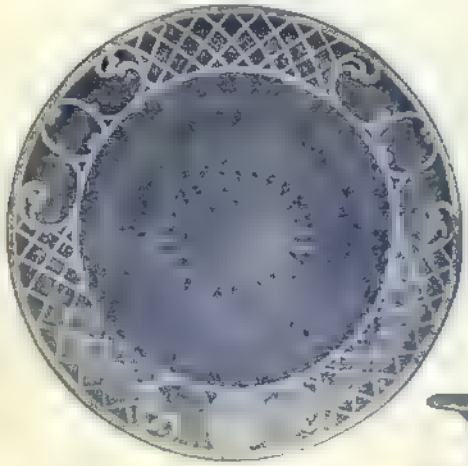


SLICED LEMON DISH
No. 3281/332 Each $3.75
Diameter, 5½ inches
Height, 1¼ inches.

FRUIT OR SALAD BOWL.
No. 3848/378 Each $9.75
Height, 2¼ inches
Diameter, 7 inches

FINGER BOWL AND PLATE SET.
No. 3849/332 and 3499/332. 2-piece set complete, per set. $5.50
Separate pieces as follows
No. 3849 332 Finger Bowl, each $3.75
No. 3499/332 Plate, each 2.75
Height Finger Bowl, 2¼ inches.
Diameter Finger Bowl, 4½ inches
Diameter of plate, 5⅞ inches

BON BON DISH
No. 3848/378 Each.....$11.50
Height, 1 inch
Diameter, 8 inches



WHIPPED BISCUIT OR FRUIT BOWL.
No. 3744/332 Each..... .....$8.50
Height, 2 inches.
Diameter, 9 inches.

Side view No. 3744, 332.

FLARED FRUIT OR SALAD BOWL.
No. 3848, 378 Each... $11.50
Height, 3 inches.
Diameter, 8½ inches.

CIGAR JAR
No. 3711 345 Each ... $20.75
Height, 8 inches.
Diameter of body, 4¾ inches.

Sterling Silver Deposit 999/1000 Fine Glassware

Finest workmanship and finish.

FLUTED NAPPY

BERRY SAUCER

BERRY BOWL

8 Inch ..... Each $15.25

VASE

Each $4.50
Height, 5¾ Ins

VASE

D VASE

LOW DEEP COMPOTE.

No. 3602 332 .....Each $5.50
Height, 3 Inches
Diameter, 4¾ Inches

VASE

VASE

VASE

No 3694/356 Each $
Height, 8 Inches

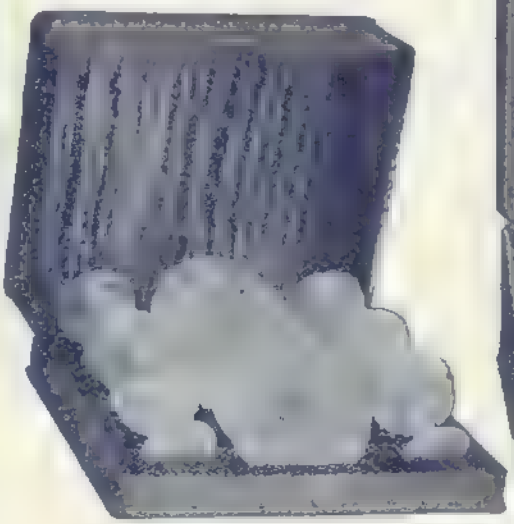
VASE

COMPOTE

VASE

AUTOMOBILE
or
WALL VASE

No. 3681/365 Each $6.25
Height, 8 Inches.



FOOTED SHERBERT AND PLATE SET

No. 104 Set complete.....Per set $36.00
Set contains 6 footed sherbert cups, height, 3½ inches, diameter, 5 inches, and 6 plates, diameter, 5¼ inches, put up in a fancy satin and plush lined silk covered case. Dimensions of case, 23x12x8 inches

WHISKEY SET

No. 103 Set complete ....Per set $40.00
Set contains one whiskey bottle, height, 12 inches, capacity 2 pints and 6 whiskey tumblers, height, 2¼ inches, put up in a fancy satin and plush lined, silk covered case. Dimensions of case, 12½x10½x7¼ inches

Finest Genuine Rich American Cut Glass

In the quality of colors, and in the delicacy of carving upon which the decorative value of glass depends, our glass shows distinctive beauty unsurpassed.

Illustrations are Reduced Size.

WHISKEY DECANTER.
Capacity, 1 quart; height, 12 inches.
No. 5100 Each $12 50

WHISKEY JUG.
Capacity 1 pint height, 8 inches.
No. 5101 Each..... $15.75

WHISKEY GLASS.
Height 2¾ inches.
Per doz.
No. 5103 .....$26.75

WHISKEY GLASS.
Height 2¾ inches.
Per doz.
No. 5103 .....$26.75

WHISKEY JUG.
Capacity, 1 quart; height, 11 inches.
No. 5104 Each $26.75

WHISKEY GLASS.
Height 2¾ inches.
Per doz.
No. 5105 .... $26.75

CARAFE.
Capacity, 1 quart; height, 7½ inches.
No. 5106 Each $3 00

CARAFE.
Capacity 1 quart, height 8¾ inches.
No. 5107 Each $11 25

CARAFE.
Capacity 1 quart, height, 9 inches.
No. 5108 Each $12 25

PITCHER.

			Each
No. 5109	4 pints; height, 11½	inches..	$24 50
No. 5110	6 pints; height, 13	inches..	35.75
No. 5111	8 pints, height, 14	inches..	53.50

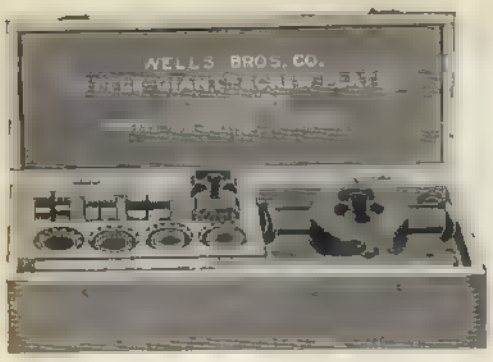
PITCHER.

			Each
No. 5112	2 pints; height, 9½	inches..	$14 50
No. 5113	4 pints; height, 11	inches..	19 60

PITCHER.

Each
No. 5114 4 pints; height, 11 inches....$15 75

BUSHING GUIDE PIPE PLATES



Assortment No. 1

Stock 36 in. long, right hand Dies only

Cutting ¼, ⅜, ½, ¾, 1.....$8 00

Assortment No. 1½

Stock 41 in. long, right hand Dies only

Cutting ½, ¾, 1, 1¼.....$10 50

Assortment No. 2

Stock 52 in. long, right hand Dies only.

Cutting 1¼, 1½, 2.....$14 00

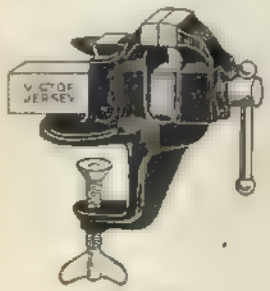
Orders for these assortments should distinctly specify Bushing Guide Pipe Plates.

Although these assortments are listed with right hand Dies only, we can furnish them, when desired, with left hand Dies only, or with both right and left hand Dies, or with right hand Dies and Taps.

VISES

VICTOR JERSEY VISES

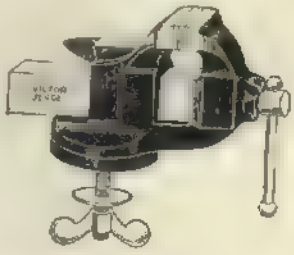
The screw (both round and flat) is made from drop forged steel, and has a square, ath[illegible] thread. The steel jaws are hardened, and are all ground to insure that they meet squarely when tightened.



No. 741

Clamp Base, Plain Iron Jaws

No.	Width of Jaws	Weight	Each
741	1½ in.	3 lbs.	$0 70
742	1¾ in.	3½ lbs.	.90
743	2 in.	3½ lbs.	1.00
744	2¼ in.	4 lbs.	1.25
745	2½ in.	5 lbs.	1.50
746	3 in.	8¾ lbs.	2 00

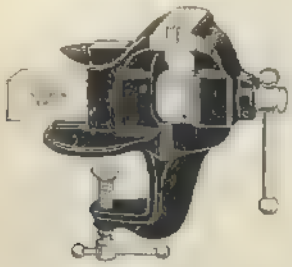


No. 776

Swivel Base, Hardened Tool Steel Jaws

No.	Width of Jaws	Weight	Each
772	1¾ in.	3 lbs.	$1 35
773	2 in.	3½ lbs.	1.45
774	2¼ in.	4½ lbs.	1 75
775	2½ in.	5½ lbs.	2.10
776	3 in.	9½ lbs.	2 85

One in a package



No. 766

Clamp Base, Hardened Tool Steel Jaws

No.	Width of Jaws	Weight	Each
761	1 in.	3 lbs.	$0 75
762	1¾ in.	3½ lbs.	1.15
763	2 in.	3½ lbs.	1.30
764	2¼ in.	4 lbs.	1.55
765	2½ in.	5 lbs.	1 85
766	3 in.	8¾ lbs.	2.50

One in a package

Assortment of 12

12 Vises and 1 Stand, as [illegible] $14 3[illegible]

Stand Contains

2 each Nos. 741, 742 and 743.

1 each Nos. 744, 745, 746, 761, 763 and 772.

Weight 64 pounds.

One assortment in a box

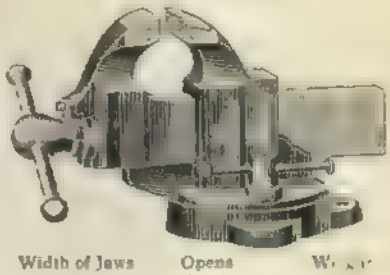
VISES

PARKER'S ECLIPSE

STATIONARY BASE

No.	Width of Jaws	Opens	Weight	Each
102-3	3 in.	4 in.	23 lbs.	$6.00
103-3½	3½ in.	5 in.	35 lbs.	7.00
104-4	4 in.	6 in.	43 lbs.	8.50
105-4½	4½ in.	6½ in.	61 lbs.	10.00

SWIVEL BASE

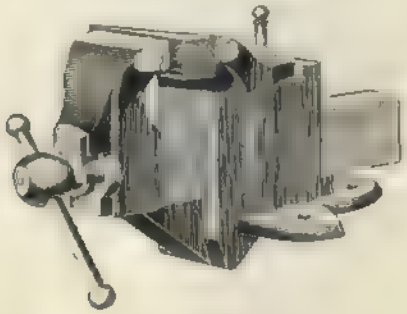


No.	Width of Jaws	Opens	Weight	Each
202-3	3 in.	4 in.	27 lbs.	$7.50
203-3½	3½ in.	5 in.	42 lbs.	8.75
204-4	4 in.	6 in.	58 lbs.	10.50
205-4½	4½ in.	6½ in.	76 lbs.	12.50

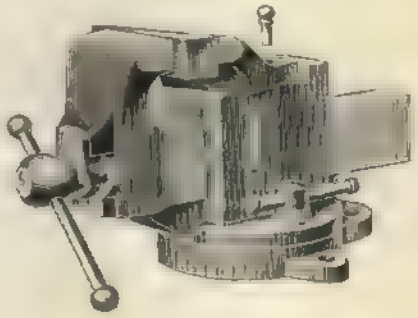
The steel faces are milled and fitted to the jaws and the jaws fit absolutely. The swivel device is a feature being operative at any and all points and is adjustable.

PARKER'S VICTOR

STATIONARY BASE



SWIVEL BASE



Semi-Steel

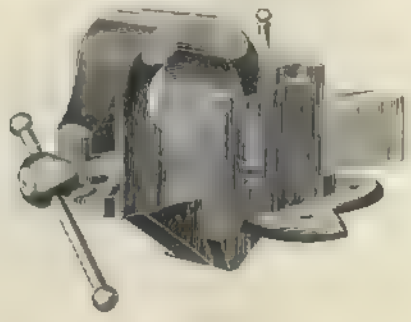
Self-adjusting Back Jaws, which automatically adapt themselves for holding wedge-shaped pieces

No.	Width of Jaws	Opens	Weight	Each
370	3¼ in.	3⅜ in.	25 lbs.	$ 6.50
371	3⅝ in.	5 in.	40 lbs.	7.00
371½	4 in.	5 in.	43 lbs.	9.00
372	4½ in.	6 in.	59 lbs.	10.00

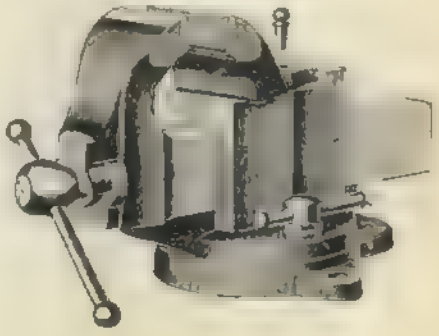
No.	Width of Jaws	Opens	Weight	Each
271	3⅜ in.	5 in.	49 lbs.	$ 8.50
271½	4 in.	5 in.	54 lbs.	10.50
272	4½ in.	6½ in.	66 lbs.	12.50

PARKER'S VICTOR FILERS

STATIONARY BASE



SWIVEL BASE



Semi-Steel

Have swivel-back jaws, giving instant adjustment to wedge-shaped pieces.

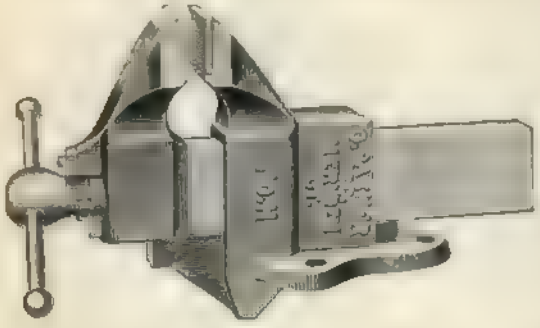
No.	Width of Jaws	Opens	Weight	Each
378	4¼ in.	5½ in.	42 lbs.	$8.00

No.	Width of Jaws	Opens	Weight	Each
278	4¼ in.	5½ in.	48 lbs.	$10.00

VISES

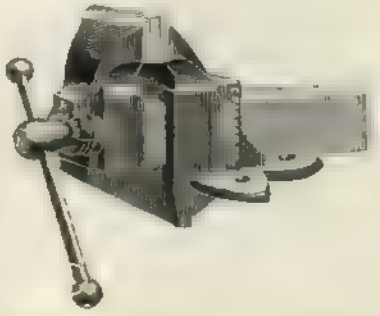
PARKER'S

STATIONARY VULCAN COACHMAKERS'



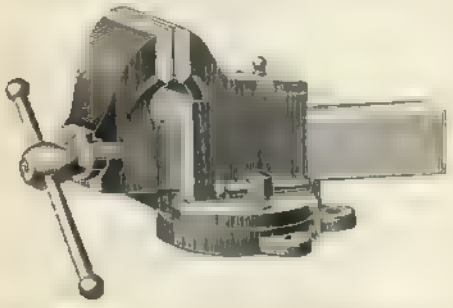
No	Width of Jaws	Opens	Weight	Each
H	4½ in.	9½ in.	64 lbs	$9 50

STATIONARY COACHMAKERS'



No	Width of Jaws	Opens	Weight	Each
4000	4 in	8 in	37 lbs	$10 00

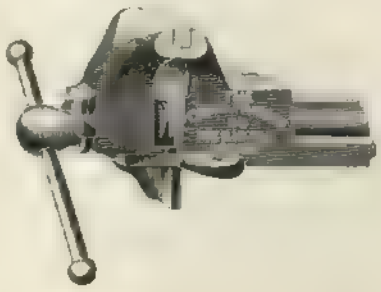
SWIVEL VICTOR WOODWORKERS'



Steel faces self adjusting jaws for holding irregular shapes

No.	Width of Jaws	Opens	Weight	Each
276	4 in.	7½ in.	40 lbs	$9.50

OVAL SLIDE



Inserted Steel Faces to Both Jaws

No	Width Jaws	Opens	Weight	Each
30	2½ in	3¾ in	8½ lbs.	$2 50
31	3 in	4 in	13 lbs	3 00
32	3½ in	4 in	19 lbs	4 25
33	3½ in	4 in	22 lbs.	4 75
34	4 in	4 in	28 lbs	6 50
35	4¼ in	4½ in	35 lbs	9 50

SOLID-BOX BLACKSMITHS'

Wrought Steel

No.	Approximate Weight	Width of Jaws	Each
35	35 lbs	3½ in	$10 00
40	40 lbs	4 in	11 50
45	45 lbs	4½ in	11 50
50	50 lbs	4½ in	11 50
55	55 lbs	4½ in	12 00
60	60 lbs	5 in	13 00
65	65 lbs	5 in	14 00
70	70 lbs	5½ in	15 00
75	75 lbs	5½ in	16 00
80	80 lbs	5½ in	17 50
85	85 lbs	5 in	18 50
90	90 lbs	5¾ in	20 00
95	95 lbs	5¾ in	21 00
100	100 lbs	6 in	22 00
110	110 lbs.	6 in	24 00
120	120 lbs	6½ in	26 00
130	130 lbs	6½ in	29 00
140	140 lbs	7 in	33 00
150	150 lbs	7 in.	36 00

HAND VISES

Black With Bright Jaws

No. 140. 4 in., per dozen . . . $3 00

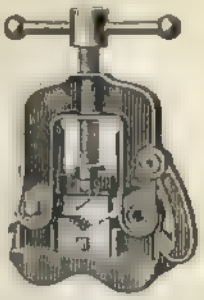
VISES

PARKER'S SWIVEL COMBINATION

A Combination Vise that is strong and compact.

No.	Jaws	Opens	Holds Pipe	Weight	Each
7	3⅝ in.	5 in.	2 in.	39 lbs.	$16.00
8	4½ in.	6 in.	3 in.	57 lbs.	20.00

PIPE VISES



Armstrong Pattern, Malleable Iron

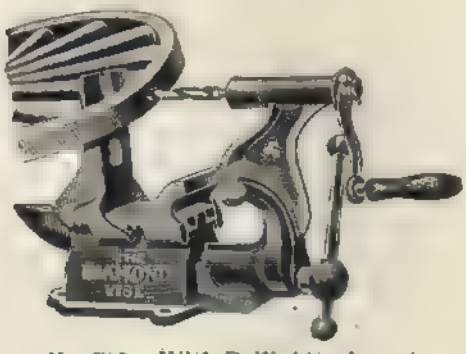
Hinged frame with hook lock.

No.	Pipe Capacity	Each
0 S	⅛ to 2 in	$ 8.00
1 S	⅛ to 2½ in	10.00
2 S	¼ to 3½ in.	14.00
3 S	⅓ to 4½ in.	20.00

EXTRA PARTS

No.	Frame	Base	Screw and Handle	Jaw Clamps	Hook	Jaws per Set
0 S	$ .80	$1.00	$ .70	$ .30	$ .30	$ .75
1 S	.90	1.10	.80	.30	.30	.90
2 S	1.00	1.45	1.00	.40	.40	1.25
3 S	1.40	1.60	1.40	.60	.50	1.50

DIAMOND VISES



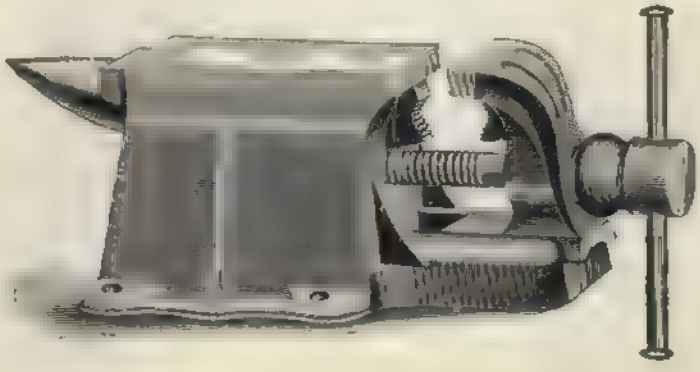
No. 360. With Drill Attachment

Face of Anvil 7 x 3 in. Holds pipe up to 2 in

No.	Width of Jaws	Opens	Weight	Each
350	4 in	12 in.	36 lbs	$6.50
360	4 in.	12 in.	50 lbs	6.50

COMBINATION ANVIL AND VISE

With Jaws for Holding Pipe



Collet Jaws

Combination Anvil and Vise.....each, $2.00

The face is 3 in. wide, 7 in long. Jaws are 3 in. wide and open 4 inches.

ANVILS

COLUMBUS TRENTON

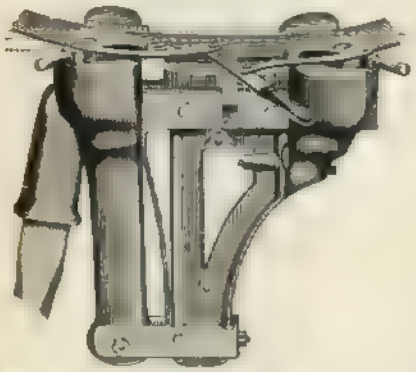
Columbus Trenton Anvils are forged from new solid ingot steel, faced with one solid piece of Special High Grade Tool Steel

Weight each, pounds	70 to 80	80 to 90	90 to 100	100 to 110	110 to 120	120 to 130	130 to 140
Per pound							
Weight each, pounds	140 to 150	150 to 160	160 to 180	180 to 200	200 to 225	225 to 250	250 to 350	350 to 400
Per pound							

Furnished in General Blacksmiths', Farriers' Chip and Plain Horn and Horseshoers

TIRE AND AXLE SHRINKER

*THE LANCASTER



The jaws are drop forged from solid tool steel, hardened and tempered by our own process, makes them far superior to chilled cast iron jaws such as are found on most all other medium priced shrinkers. The jaws and cross arm as well as all other parts are heavy strong and substantial. The Lancaster Tire and Axle Shrinker will shrink all sizes of tires up to 4x1½ in. and axle up to 1¾ in. Weight 200 lbs. each $20.00

TIRE BENDER

*THE CHAMPION OLD STYLE

The frame is in one solid piece. It is double back geared and worked with two cranks. The center roll can be removed by taking out the screw. Its capacity for bending is 3x¾ in. to the lightest tire.

The Champion Old Style Tire Bender, weight 125 lbs., each $1.00

TUYERE IRONS

No. 1. Single Duck's Nest, weight 12 lbs., per dozen..$10.80

No. 3. Double faced weight 14 lbs., per dozen.....$12.50

*Not carried in stock.

ANCHOR BRAND CLOTHES WRINGERS

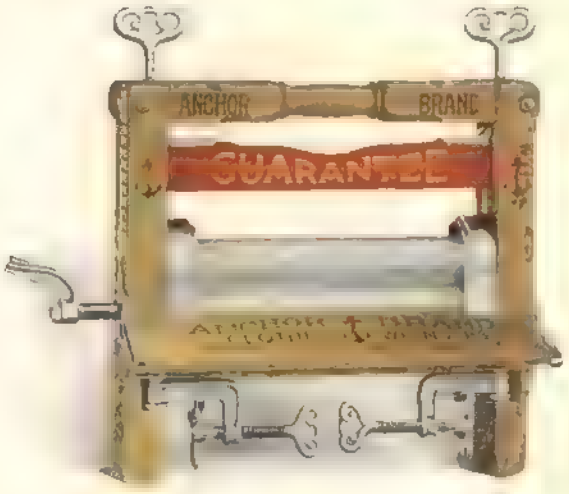
AUTOMATIC

Purchase Gear with Chain. Automatic Adjustment

Warranted Five Years

No. 110 Automatic. Rolls 10x1¾ in., per dozen $
No. 111 Automatic. Rolls 11x1¾ in., per dozen

GUARANTEE



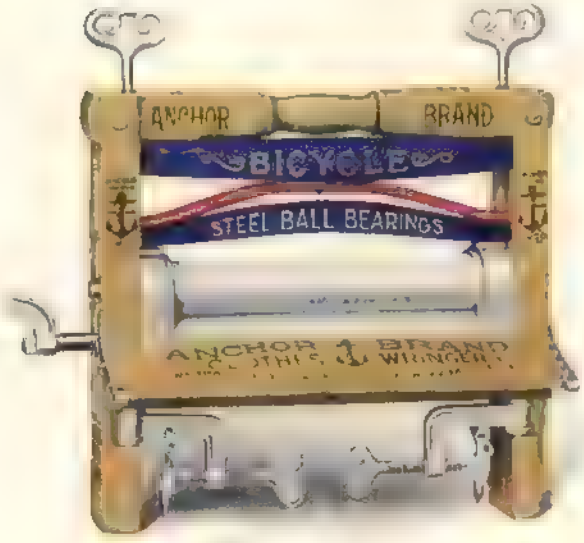
Lovell's Cog Wheel Shields

Steel Ball Bearings. Steel Spiral Springs

Warranted Five Years

No. 780 Guarantee. Rolls 10x1¾ in., per dozen .. $
No. 781 Guarantee. Rolls 11x1¾ in., per dozen
No. 782 Guarantee. Rolls 12x1¾ in., per dozen

BICYCLE



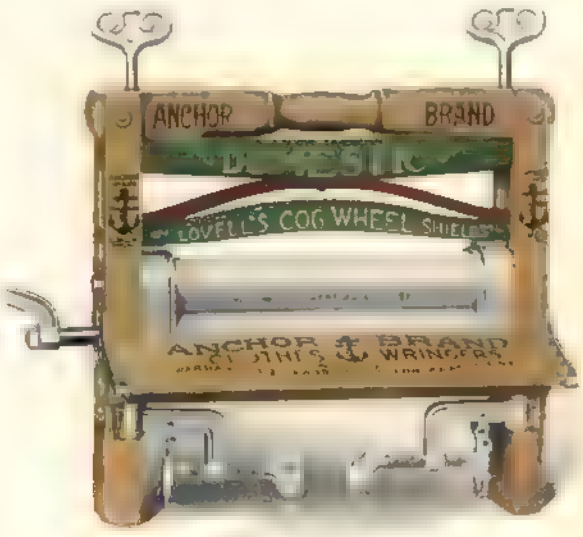
Lovell's Cog Wheel Shields

Steel Ball Bearings. Flat Steel Spring

Warranted Three Years

No. 770 Bicycle. Rolls 10x1¾ in., per dozen $
No. 771 Bicycle. Rolls 11x1¾ in., per dozen
No. 772 Bicycle. Rolls 12x1¾ in., per dozen

DOMESTIC



Lovell's Cog Wheel Shields

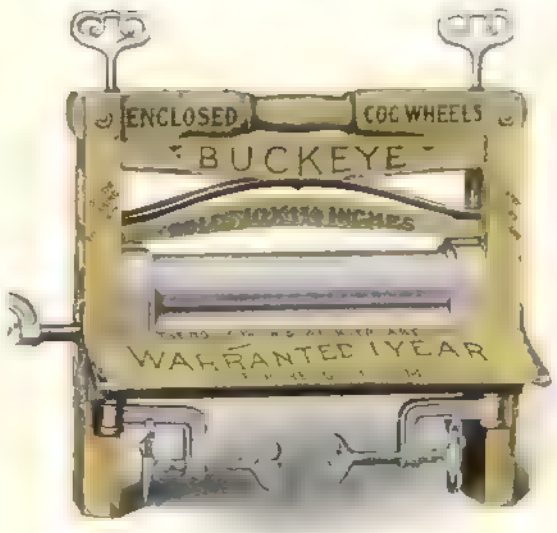
Galvanized Metal Bearings. Flat Steel Spring

Warranted Three Years

No. 670 Domestic. Rolls 10x1¾ in., per dozen $
No. 671 Domestic. Rolls 11x1¾ in., per dozen

ANCHOR BRAND CLOTHES WRINGERS

BUCKEYE



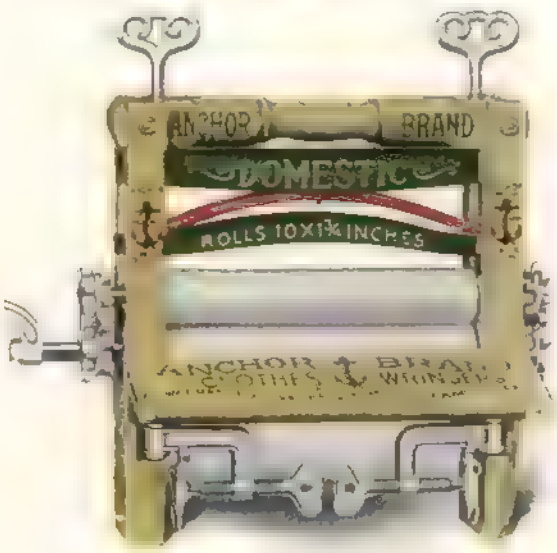
Lovell's Cog Wheel Shields

Plain Metal Bearings. Flat Steel Spring

Warranted One Year

No. 630 Buckeye. Rolls 10x1¾ in., per dozen. .. $.....

DOMESTIC

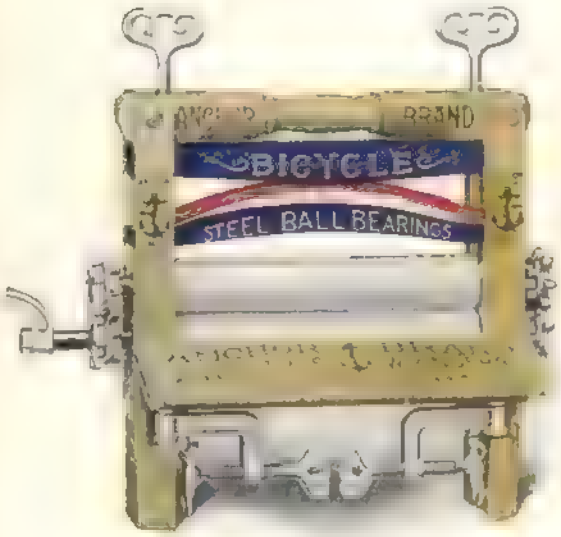


Galvanized Metal Bearings. Flat Steel Spring

Warranted Three Years

No. 110 Domestic. Rolls 10x1¾ in., per dozen.....$. .
No. 111 Domestic. Rolls 11x1¾ in., per dozen..... . ...

BICYCLE

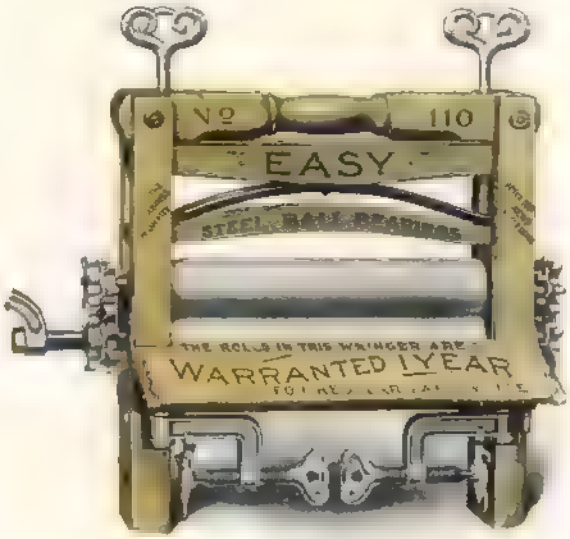


Steel Ball Bearings. Flat Steel Spring

Warranted Three Years

No. 110 Bicycle. Rolls 10x1¾ in., per dozen. .....$... .
No. 111 Bicycle. Rolls 11x1¾ in., per dozen..... .....
No. 112 Bicycle. Rolls 12x1¾ in., per dozen .. ..

EASY



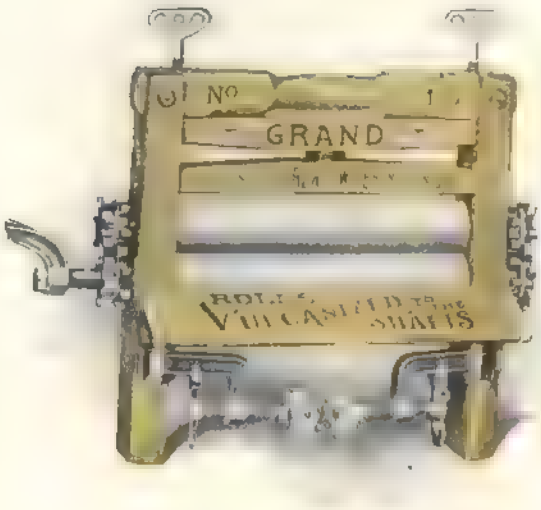
Steel Ball Bearings. Flat Steel Spring.

Warranted One Year

No. 110 Easy. Rolls 10x1¾ in., per dozen.. .. ...$

ANCHOR BRAND CLOTHES WRINGERS

GRAND

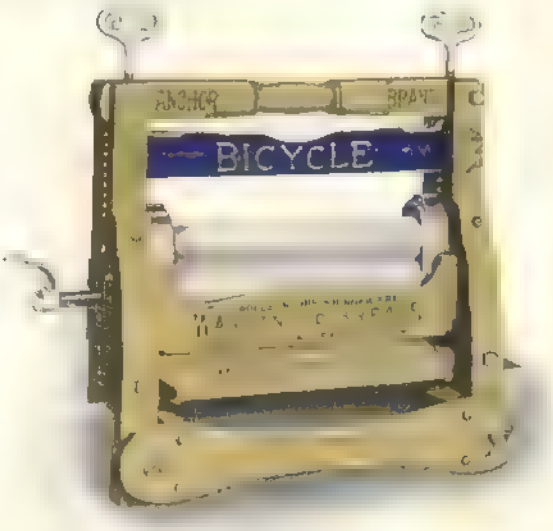


Plain Wood Bearings. Rubber Spring

Not Warranted

No. 110 Grand. Rolls 10x1¾ in., per dozen $

BICYCLE



Lovell's Cog Wheel Shields

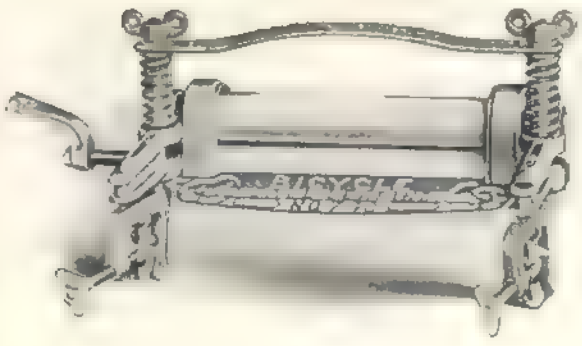
Steel Ball Bearings. Steel Spiral Springs

For round tubs [illegible] or stationary wood or [illegible] tubs. Reversible [illegible] board conducts the water into [illegible] tub. Clamps open 2 inches

Warranted Three Years

No. 760S Bicycle. Rolls 10x1¾ in., per dozen .. $
No. 761S Bicycle. Rolls 11x1¾ in., per dozen.

BICYCLE



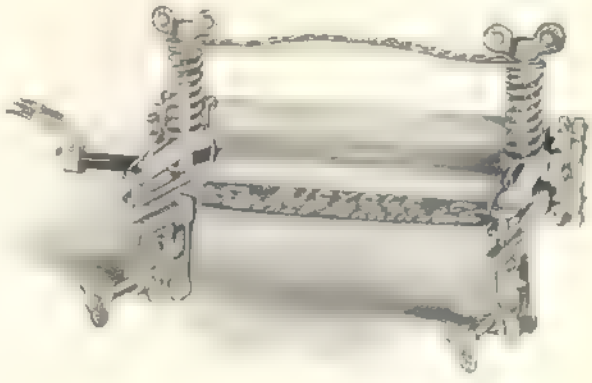
Lovell's Cog Wheel Shields

Steel Ball Bearings. Steel Spiral Springs

Warranted Three Years

No. 740 Bicycle. Rolls 10x1¾ in., per dozen $
No. 741 Bicycle. Rolls 11x1¾ in., per dozen

BICYCLE



Galvanized Malleable Iron Frame

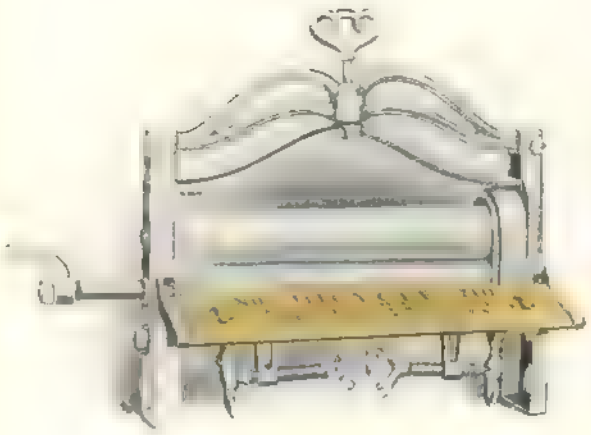
Steel Ball Bearings. Steel Spiral Springs

Warranted Three Years

No. 122 Bicycle. Rolls 10x1¾ in. per dozen.....$
No. 123 Bicycle. Rolls 11x1¾ in., per dozen.....
No. 124 Bicycle. Rolls 12x1¾ in., per dozen.

ANCHOR BRAND CLOTHES WRINGERS

BICYCLE



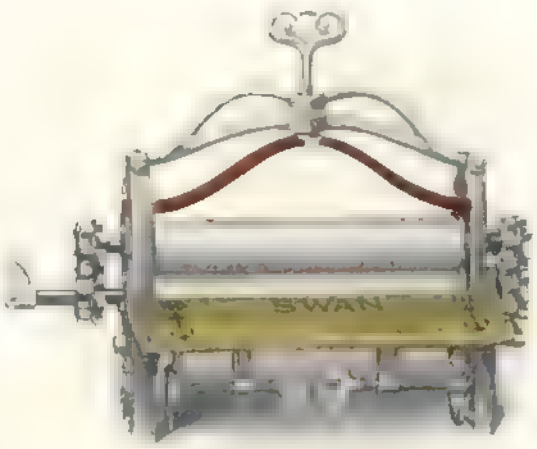
Lovell's Cog Wheel Shields

Steel Bearings Galvanized Steel Spring

Warranted Three Years

No. 710 Bicycle. Rolls 14x1¾ in., per dozen. .
No. 711 Bicycle. Rolls 11x1¾ in., per dozen .

SWAN



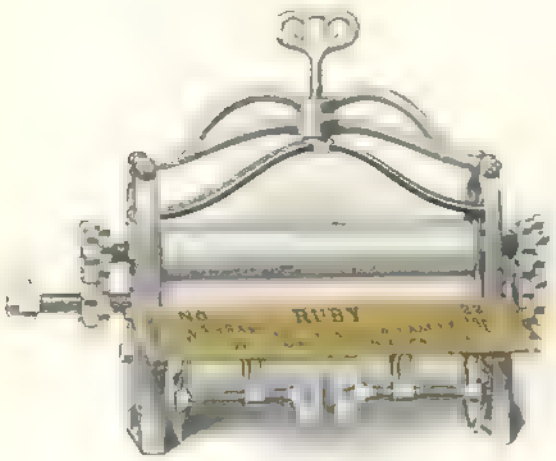
Galvanized Malleable Iron Frame

Flat Steel Spring

Warranted Three Years

No. 22 Swan. Rolls 10x1¼ in., per dozen

RUBY



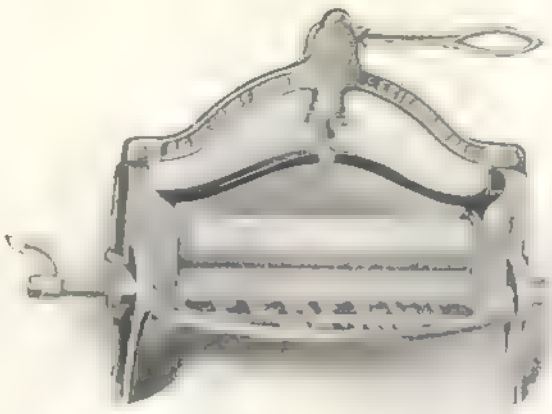
Galvanized Malleable Iron Frame

Flat Steel Spring

Warranted One Year

No. 22 Ruby. Rolls 10x1¼ in., per dozen .

PERFECT



Lovell's Cog Wheel Shields

Galvanized Malleable Iron Frame.

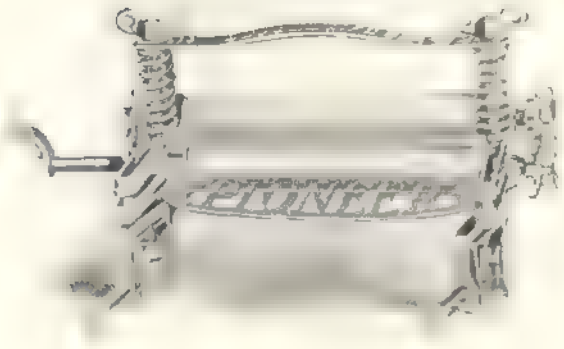
Adjustable lever fastens the wringer to the tub, and at same time pressure is adjusted to the rolls

Warranted Two Years

No. 200 Perfect. Rolls 11x1¼ in., per dozen..

ANCHOR BRAND CLOTHES WRINGERS

PIONEER



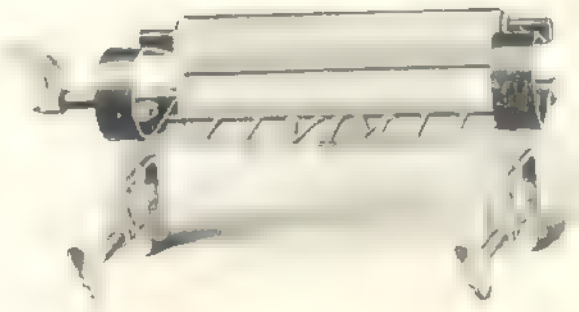
Galvanized Malleable Iron Frame.

Steel Spiral Springs

Warranted One Year

No. 22 Pioneer. Rolls 10x1¼ in., per dozen ..... $.....

VIM



Not Warranted

No. 2 Vim. Rolls 10x1¼ in., per dozen ..... $

BICYCLE

Lovell's Cog Wheel Shields.

Steel Ball Bearings. Flat Steel Spring.

Warranted Three Years

Oscillating water board conducts the water into either tub

No. 770B Bicycle. Rolls 10x1¼ in., per dozen. ... $ ...
No. 771B Bicycle. Rolls 11x1¼ in., per dozen

DOMESTIC

Lovell's Cog Wheel Shields

Flat Steel Spring. Galvanized Metal Bearings

Warranted Three Years

Oscillating water board conducts the water into either tub

No. 670B Domestic. Rolls 10x1¼ in., per dozen ... $

ANCHOR BRAND CLOTHES WRINGERS

BRIGHTON

Lovell's Cog Wheel Shield
Plain Metal Bearings. Flat Steel Spring.

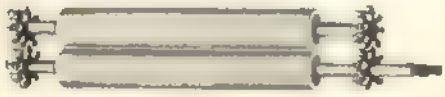
Warranted One Year

Oscillating water board conducts the water into either tub

No. 630B Brighton. Rolls 10 x 1¾ in., per dozen.. .$.....

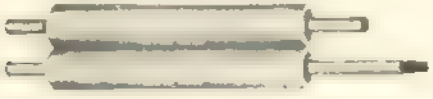
WRINGER ROLLS

Geared



Size of roll, 10 x 1¾ in., per dozen..... .. .. ..$.....
Size of roll, 11 x 1¾ in., per dozen.. ... .
Size of roll, 12 x 1¾ in., per dozen..... .....

Friction



Size of roll, 10 x 1¾ in., per dozen..... ... .$. ..
Size of roll, 11 x 1¾ in., per dozen..... . ...
Size of roll, 12 x 1¾ in., per dozen ....

Enclosed Gear

Size of roll, 10 x 1¾ in., per dozen..... .... $....
Size of roll, 11 x 1¾ in., per dozen. ....
Size of roll, 12 x 1¾ in., per dozen. ....

HARTFORD FOLDING BENCH

Made of [illegible] for the purpose of [illegible] Adjustable [illegible] [illegible] [illegible] 10, 11 or 12 inches. Packed [illegible]

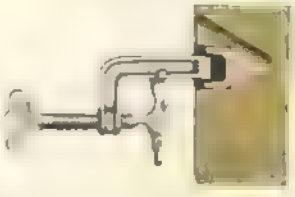
Per dozen .... $

REGULAR HANDLES

No. 3. Regular handles, per dozen ... ... $

CLAMPS FOR WOOD FRAME WRINGERS

Right and Left



No. 7 Right Hand, crank side
No. 8 Left Hand, opposite crank side.

Per dozen ....$

PRESSURE SCREWS

No. 2 Pressure Screws

Per dozen .....

REVERSIBLE

No. 6

[illegible] Swivel Screw

Per dozen ....$..

ICE TOOLS

For Shipment Direct from Factory

ICE MARKERS

With Swing Guide

For marking a field of Ice into squares before grooving with Plow.

With 4 in. Markers; 11 Cutting Teeth

	Each
No. 355—With 22 in. Swing Guide	$58.00
No. 356—With 22 in. and 32 in. Swing Guides	66 00
No. 359—With 22 and 32 in. Patent Extension Swing Guide	61 00

One in a Crate; Weight 145 Lbs. Each

ICE PLOWS

Follows the grooves made by the marker and cuts easily to their full depth, the No. 388 Plow is for small dealers who do not wish to purchase a Marker separate from the Plow.

WITH SWING GUIDE ATTACHED	Each
No. 388—Depth of Cut 8 in.; 7 Cutting Teeth	$50.50

Weight 150 Lbs. Each

PLOW ONLY, WITHOUT GUIDE	Each
No. 377—Depth of Cut 10 in.; 6 Cutting Teeth	$53 00

Weight 145 Lbs. Each

One in a Crate

PLOW ROPES; 8 ft. Long

	Each
No. 412—With Thimble on one End, Patent Hook on Opposite End	$1 75
No. 413—With Patent Hooks on both ends	2.10

Weight 2 Lbs. Each

ICE GRAPPLES

Pole Grapple

Jack Grapple

Used to draw cakes of ice up an Incline by Horse or Steam Power, in the absence of Elevator Machinery; Both styles are made of Steel; The Pole Grapple may be rigged to return on an Overhead Wire, the Jack Grapple [illegible]

	Each
No. 433—Pole Grapple, 8 in. Drop, with Handle	$4 25
No. 434—Pole Grapple, 8 in. Drop, without Handle	3 75

Weight 14 Lbs. Each

No. 435—Extra Clevises for No. 433	75
No. 436—Jack Grapples, 8 in. Drop. Weight 19 Lbs. Each	4 25

SPLITTING FORKS, Knob Handle

	Each
No. 440—4 ft. 9 in. Long; 14 inch Tines; Weight 17½ Lbs. Each	$4 25
No. 441—4 ft. 6 in. Long; 12 inch Tines; Weight 15 Lbs. Each	4 00

SPLITTING FORKS, Ring Handle

	Each
No. 443—4 ft. 10½ in. Long; 14 inch Tines; Weight 18 Lbs. Each	$4 50
No. 444—4 ft. 7½ in. Long; 12 inch Tines; Weight 15½ Lbs. Each	4.25

CALKING BARS, Hollow Handle

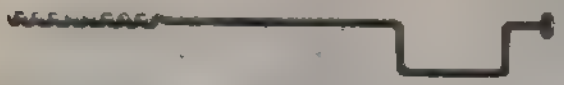
Used to Calk the Grooves to keep Water from running in and freezing up the Grooves

	Each
No. 457—4 ft. 3 in. Long; 14x1¾ in. Blade; Diameter of Handle 1 in	$2.50

Weight 8 Lbs. Each

ICE TOOLS

For Direct Shipment from factory



ICE AUGERS

Used in making Holes through which to measure the Depth of Water, Insert Pins for Stretching Lines, etc.

	Each
No. 510—Size 1½ in., Length 3 ft. 6 in.	$3 50

Weight 6 Lbs. Each

MEASURING RODS

The Iron Measure marked on the Bottom Side of the Hole made by the Ice Auger, and the Thickness of the Ice can be accurately determined, marked off by 1 inch Notches.

	Each
No. 512—24 inches Long; Polished	$0 50

ICE HOOKS

Made of Best Quality Stock, Heavily Steeled

4½ ft. Hooks are used on the Runs; in the Houses and in Loading Wagons. 3 and 3½ ft. Hooks are used for Packing Ice in contractors' quarters

No. 520½—NEW YORK PATTERN

Length, Feet	3	3½	4	4½	5	6	7	8
Weight Dozen, Lbs	28	31	34	37	40	46	52	58
Per Dozen	$9.00	9.00	9.25	9.50	10.00	10.50	11.00	12 00

CAR OR BOAT ICE HOOKS

Same as New York Pattern, except the Pusher Strap Iron extends 18 inches down the Handle to protect the wood for Car or Boat use.

	Per Dozen
No. 522—4 ft. Long; Weight 45 Lbs. per Dozen	$12 00
No. 523—4½ ft. Long; Weight 48 Lbs. per Dozen	12.25

CAR ICING HOOKS

Has a Square Steel Splitting Iron or Breaker, 16 in. Long, in place of Pusher Iron. Handle is of 1 in. oval size into the Socket part of the Heavy Solid Breaker and Hook, used for breaking up Ice Cakes when Icing Cars.

	Per Dozen
No. 524½—5 ft. Long; Weight 63 Lbs. per Dozen	$21 00
No. 524¾—5½ ft Long, Weight 66 Lbs. per Dozen	21 00

CANT ICE HOOKS

The Cant-Ice Hook is used to Edge up Ice when packing into Houses or Barges, and is much in favor with Western Packers.

Four foot Handles and Right Handed Hooks (like Cut) will be shipped (unless otherwise ordered).

	Per Dozen
No. 525—4 ft. Handles, Weight 70 Lbs. per Dozen	$16 00
No. 526—4½ ft. Handles, Weight 75 Lbs. per Dozen	16.25
No. 527—Hooks only; Weight 10 Lbs. per Dozen	6.00

ICE TONGS

No. 540

BOSTON DELIVERY TONGS

These Tongs are the very best models which can be produced; quality is unsurpassed. The Points are Finest Tool Steel, carefully tempered.

No. 540—Solid Handles; Red Finished, Points ¾ in. Wide

Opens, In.	13	14½	16½	24	26
Weight Dozen, Lbs.	34	39	46	62	68
Per Dozen	$13.00	13.50	14.00	16.00	17.00

No. 542—Extra Hollow Handles; Black, Points ¾ in Wide

Opens In	13	14½	16½	24
Weight Dozen, Lbs.	32	37	44	60
Per Dozen	$17.50	18.00	18.50	20.50

No. 542

NEW YORK TONGS

These Tongs have Solid, Swell Handles, Steel Bows; Narrow Tool Steel Points, when open do not drop as Low on the Cake as the Boston Pattern.

No. 545

No. 545—Solid Handles, Red; Narrow Points

Opens, In.	14½	17	20	24
Weight Dozen, Lbs.	36	40	45	52
Per Dozen	$13.00	13.50	14.00	16.00

MANHATTAN TONGS

Have the Boston Hollow Handles with Short Shanks; a Modified Pattern of Bows and Wide Points.

No. 546½—Black Hollow Handles; Red Points

Opens, In.	14½	17	20	24
Weight Dozen, Lbs.	35	39	44	50
Per Dozen	$15.00	15.50	16.00	18.00

No. 546½

ICE TONGS

For Shipment Direct from Factory

MILWAUKEE PATTERN

Hollow Handles; Thin Points, Opens 12 in.

	Per Dozen
No. 549½—Black Finish	$15.00
No. 549—Polished Finish	18.00

Weight 48 Lbs. per Dozen

CAR TONGS

Car or Corner, Solid Steel ¾ in. Points, Hollow Handles

	Per Dozen
No. 544—Opens 10 in.	$17.50
No. 544½—Opens 12 in.	18.00

Weight 48 Lbs. per Dozen

CINCINNATI CHAIN TONGS

No. 550 Black Thin Points

Opens, In.	10	12	15
Weight Dozen, Lbs.	20	21	24
Per Dozen	$11.00	11.50	12.00

KANSAS CITY CHAIN TONGS

Heavier than Cincinnati Pattern

No. 550½ Black; Thin Points

Opens, In.	10	12	15
Weight Dozen, Lbs.	27	28	30
Per Dozen	$11.00	11.50	12.00

PATENT LINK TONGS

No. 551 Black, Thin Points

Opens, In.	10	12	15
Weight Dozen, Lbs.	27	28	30
Per Dozen	$11.00	11.50	12.00

BUFFALO TONGS

Spear Steel Narrow Solid Handles, with Extra Heavy Points, held underneath the Rings.

	Black Finish	
Nos.	555	555½
Opens, In.	12	14
Weight Dozen, Lbs.	28	32
Per Dozen	$13.00	13.50
	Polished Finish	
Nos.	556	556½
Per Dozen	$18.00	18.50

EDGING UP TONGS

For use of Packers who Edge up their Ice

Eastern Pattern; Narrow Points; Opens 26 in.

	Per Dozen
No. 561—Solid Handles	$18.00
No. 561½—Hollow Handles	18.00

Weight 50 Lbs. Per Dozen

DRAY TONGS

For moving Ice in House during the Summer.

	Per Dozen
No. 565—Solid Handles, Red Finish, ¾ in. Points	$21.00

Weight 84 Lbs. per Dozen

LOWERING TONGS

For use where Overhead Space is small and cramped. Red Finish.

	Single Points		
Nos.	572	571	570
Opens, In.	14	17	21
Each	$2.00	2.00	2.00
	Weight 24½ Lbs. Each		
	Double Points		
Nos.	576	575	574
Opens, In.	14	17	21
Per Dozen	$2.75	2.75	2.75
	Weight 6 Lbs. Each		

ICE TONGS

MARKET TONGS

Market Tongs are preferred where the Heavier Hoisting Tongs are not required; Opens 24 in.; Red Finish.

	Each
No. 578—Single Point	$3 00
No. 579—Double Points	3.75

Weight 8½ Lbs. Each

No. 579

BOSTON HOISTING TONGS

Much Heavier than the Market Tongs

	Each
No. 586—Solid Claws; Opens 30 in.	$5.00

Weight 18½ Lbs. Each

No. 586

HOUSE ICE AXE

The House Ice Axe is Used for Cutting around Cakes in the House instead of Bar Chisel or Summer Bar, and is particularly adapted to this work where the Ice is packed on Edge.

	Per Dozen
No. 601—Medium; 36 in. Handle, 6 in. Blade	$36.00

Weight 6½ Lbs. Each

No. 602—Heavy; 40 in. Handle; 6½ in. Blade	36.00

Weight 7 Lbs. Each

SPLITTING AWLS

Our Awls are the best it is possible to make at any Price. The Blades are made of selected Tool Steel, finely Tempered, Nickel-Plated; have a Long Slim Taper with Needle Point such as all Icemen insist upon having

	Per Dozen
No. 629—⅞x4½ in. Blade; Pear Handle	$1 00
No. 630—⅞x6 in Blade; Round Handle	1 25
No. 632—⅞x6 in. Blade; Chisel Handle	1.25

ICE CHIPPERS

Finest Quality Blades; Malleable Iron Handle.

	Per Dozen
No. 636—4¼x2¾ in. Blade	$8.00

Weight 15 Lbs. per Dozen

ICE SHAVERS

FOUR POINTS

	Each
No. 650—3 ft. 11 in. Long; 7½x4½ in. Blade	$1.75

ICE SHAVERS

FIVE POINTS

	Each
No. 654—3 ft. 6 in. Long; 8½x6 in. Blade	$2.00

SEVEN POINTS

	Each
No. 658—4 ft. Long; 9x7½ in. Blade	$2 50

ICE TOOLS

BAR CHISELS

Used for Trimming Blocks when Storing Ice, for Spearing and Straightening the Seams, also to cut around the Cakes in Storing Ice out of the [illegible]

	Each
No. 458—4 ft. 7 in. Long; 12x4¾ in. Blade, Steel Handle	$3 50

Weight 15¾ Lbs. Each

STARTING CHISELS

[illegible] the Blocks [illegible] Inside the House after Cutting around it [illegible] Bar Blade has Gradual, Upward [illegible] Blade, made of Steel, Round Handle

	Each
No. 466—4 ft. 7 in. Long; 10x2¼ in. Blade	$3 50

Weight 14½ Lbs. Each

FLOOR SHAVER

Cuts rapidly and Easily; the Patented Rocking Blade causes the Feed to be accurate.

	Each
No. 470—4 ft. 10 in. Long; Five Tooth Blade, 6 in. Wide	$2 75

Weight 6 Lbs. Each

FLOOR LEVELERS

Made Heavy for Rapid Work where there is a large amount of Leveling to be done.

	Each
No. 476½—Cutting Width 9 in.; Length of Teeth 12 in.	$5.00

Weight 15 [illegible]

ELEVATOR FORKS

Better than an Ice Hook for Feeding Ice to the Elevator, as Two Pushing Points give better control of the Cake. The Hook affords a means of Holding Back the Ice if necessary.

	Each
No. 502—6 ft. 7 in. Long; 6 in. Tines	$1.50

SUMMER BARS

Summer Bars are also used for Cutting around and Striking up Ice in the House.

4 ft. 4 in. Long; 10x5¼ in. Blade

	Each
No. 463 —Curved Blade; Painted Handle	$4 50
No. 463½—Straight Blade; Painted Handle	4 50
No. 460 —Curved Blade; Polished Handle	6.00
No. 460½—Straight Blade; Polished Handle	5 00

Weight 17 Lbs. Each

4 ft. 3 in. Long; 9x4½ in. Blade

	Each
No. 461 —Curved Blade; Polished Handle.	$5 00
No. 461½—Straight Blade; Polished Handle.	5 00

Weight 16 Lbs. Each

SPLITTING CHISELS

Used to Split off Single Cakes either in the Canal or on the Platform Handy for General Use; Blade has Uniform Taper on Both Sides.

	Each
No. 476—4 ft. 6 in. Long; Steeled Blade; 10½x3 in. Ring Handle	$2 50
No. 477—All Tool Steel Blade, otherwise same as No. 476	2 75

Weight 14 Lbs. Each

TARPING BARS

For Wetting down a Field of Ice after a Snow Storm; has a Narrow, Cutting Blade which Penetrates the Ice easily, leaves a small Hole, which will freeze up quickly.

	Each
No. 482—4 ft. 5 in. Long; 10½x1¼ in. Blade	$2 50

Weight 13 Lbs. Each

CANAL NEEDLE BARS

A Light Tool for Splitting off Cakes where the Plow Grooving has been well done. Is also used for Sinking a Field of Ice as it makes a Very small Hole.

	Each
No. 484—4 ft. 10½ in. Long; Cuts 1 in. Round Hole.	$2 00

Weight 11 Lbs. Each

No. 484½—Field Size; Cuts 1¾ in. Round Hole	2.25

Weight 15 Lbs. Each

2 TINED NEEDLE BARS

When Plow Grooves are partially Frozen, the Two Oval Tines Break better than a Single Tined Bar.

	Each
No. 485—4 ft. 10½ in. Long; Ring Handle.	$3.50

Weight 15 Lbs. Each

3 TINED NEEDLE BARS

For Heavy Work; much Stronger and more effective.

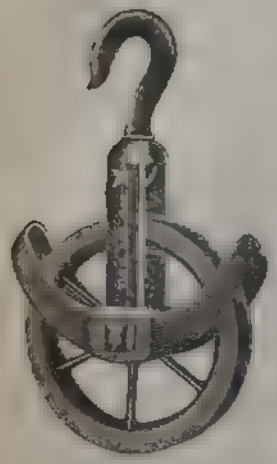
	Each
No. 487—4 ft. 10½ in. Long; Knob Handle.	$4 25
No. 486—4 ft. 10½ in. Long; Ring Handle.	4.50

Weight 15½ Lbs. Each

ICE LOADING APPARATUS

For Shipment Direct from Factory

SELF-LUBRICATING GINS



Self-Lubricating Upper Gin

These Gins are Metal to Metal Bearing and can be run at Quick Speed without [illegible] always ready for use, and will wear many times longer than any Gin Not Fitted for Bearings

No. 710 UPPER GINS

	Each
[illegible]	$ [illegible]
[illegible]	1 00
[illegible]	[illegible]
[illegible]	6 00
[illegible]	[illegible]

No. 711—LOWER GINS

	Each
Diam. [illegible]	$4 75
Diam. [illegible]	1 50
Diam. 12 in. [illegible]	[illegible]
Diam. [illegible]	[illegible]
Diam. 16 in. [illegible]	[illegible]

Self-Lubricating Lower Gin

STEEL HOUSE OR WAGON LOADING RUNS

These Steel Runs are useful in the House for Loading Wagons, and are made with Flippers on one End to cause the Ice to Slide on easily

	Each
No. 720 Length of Sides 6 ft.; over all 7 ft. 6 in.; Width 12 inches; Weight 75 Lbs.	$9 00
No. 721—16 in. Wide, otherwise same as above	9 50

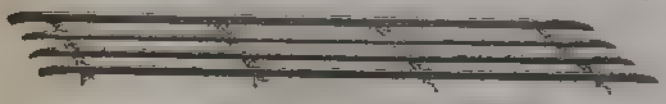
CAR RUNS

Used in Loading Cars; has Flippers on the Delivery as well as on the Receiving End

	Each
No. 722—Length of Sides 7 ft.; over all 9 ft. 6 in.; Width 12 inches; Weight 105 Lbs.	$12 50
No. 723—16 in. Wide; otherwise same as above	13.00

TEE IRON SKIDS

Tee Iron Skids are growing in favor for use in Houses; this Pattern is a great improvement over the ordinary Tee Iron Skid, made with the Center Bars of U-Iron, so that the Ice will not be allowed to stand. The Regular 3 Slat Skids are 17 in. wide for 4-Slat Surface, 22 inches Wide, Special Sizes Made to Order



No. 726—3-Slat Skids

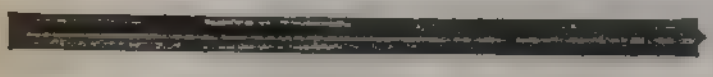
Length, Ft.	8	10	12	14	16
Each	$5 00	5 50	6.25	7.25	8 25

No. 726—4-Slat Skids

Length, Ft.	8	10	12	14	16
Each	$5 50	6.00	7 00	8 25	9 50

Average Weight 110 Lbs. Each

ICE RUN IRONS



This V Pattern Ice Run Iron is largely used. The Sharp surface slightly curved Ice does not pass over it.

	Per Foot
No. 750—Run Iron, Drilled	$0 06

In 10, 12, 14 and 16 ft. Lengths

Weight 1½ Lbs. per Foot

Half Oval Iron is used on Runs made with Sides and on Flat Wooden Skids for the Center Bars.

	Per Foot
No. 754—Half Oval, 1x⅝ in.	$0.06

In 10, 12, 14 and 16 ft. Lengths

Weight 1 Lb. per Foot

Unless Otherwise Specified Square-End Run Irons and Half-Oval Irons will be sent

For Ice Axes, see page 511; Ice Saws, page 767

IRON PLANES

Stanley Rule & Level Co.'s

BED ROCK

SMOOTH

No. 603. Smooth, length 8 in., 1¾ in. cutter, each $2.55
No. 604. Smooth, length 9 in., 2 in. cutter, each 2.75

JACK AND JOINTER

No. 605. Jack, length 14 in., 2 in. cutter, each $3.20
No. 606. Fore, length 18 in., 2⅜ in. cutter, each.... 3.85
No. 607. Jointer, length 22 in., 2⅜ in. cutter, each 4.60
No. 608. Jointer, length 24 in., 2⅜ in. cutter, each 5.50

SMOOTH, JACK, FORE AND JOINTER

Corrugated Bottom

No. 603C. Smooth, length 8 in., 1¾ in. cutter, each..$2.55
No. 604C. Smooth, length 9 in., 2 in. cutter, each.. 2.75
No. 605C. Jack, length 14 in., 2 in. cutter, each.. 3.20

No. 606C. Fore, length 18 in., 2⅜ in. cutter, each ..$3.85
No. 607C. Jointer, length 22 in., 2⅜ in. cutter, each.. 4.60
No. 608C. Jointer, length 24 in., 2⅜ in. cutter, each 5.50

BAILEY ADJUSTABLE

SMOOTH

No. 1. Smooth, length 5 in., 1 in. cutter, each $1.65
No. 2. Smooth, length 7 in., 1⅝ in. cutter, each 2.05
No. 3. Smooth, length 8 in., 1¾ in. cutter, each 2.20
No. 4. Smooth, length 9 in., 2 in. cutter, each 2.40
No. 4½. Smooth, length 10 in., 2⅜ in. cutter, each 2.75

Nos. 1, 2 and 4½ are not carried in stock.

JACK, FORE AND JOINTER

No. 5. Jack, length 14 in., 2 in. cutter, each $2.75
No. 5½. Jack, length 15 in., 2¼ in. cutter, each 3.15
No. 6. Fore, length 18 in., 2⅜ in. cutter, each 3.50
No. 7. Jointer, length 22 in., 2⅜ in. cutter, each 4.00
No. 8. Jointer, length 24 in., 2⅜ in. cutter, each 4.80

SMOOTH

Corrugated Bottom

No. 2C. Smooth, length 7 in., 1⅝ in. cutter, each $2.05
No. 3C. Smooth, length 8 in., 1¾ in. cutter, each.... 2.20
No. 4C. Smooth, length 9 in., 2 in. cutter, each.... 2.40
No. 4½C. Smooth, length 10 in., 2⅜ in. cutter, each.... 2.75

Nos. 2C and 4½C are not carried in stock.

JACK, FORE AND JOINTER

Corrugated Bottom

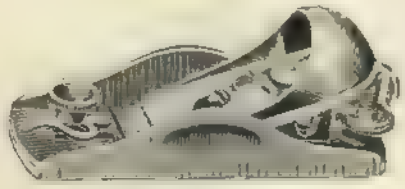
No. 5C. Jack, length 14 in., 2 in. cutter, each...$2.75
No. 5½C. Jack, length 15 in., 2¼ in. cutter, each 3.15
No. 6C. Fore, length 18 in., 2⅜ in. cutter, each 3.50
No. 7C. Jointer, length 22 in., 2⅜ in. cutter, each 4.00
No. 8C. Jointer, length 24 in., 2⅜ in. cutter, each 4.80

One in a paper box

IRON BLOCK PLANES

Stanley Rule & Level Co.'s

BAILEY ADJUSTABLE



No. 9½. Block plane, 6 in. in length, 1¾ in. cutter, each $1.10
No. 9¾. Rosewood handle, 6 in. in length, 1¾ in. cutter, each 1.30
No. 16. Nickel trimmings, 6 in. in length, 1¾ in. cutter, each 1.25
No. 17. Nickel trimmings, 7 in. in length, 1¾ in. cutter, each 1.35

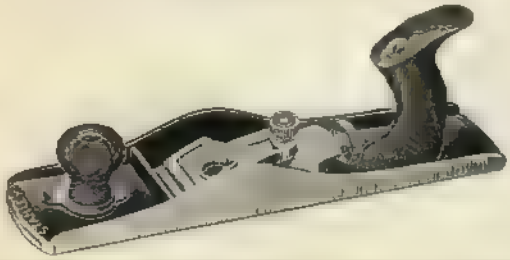
Knuckle Joint

No. 18. Nickel trimmings, 6 in. in length, 1¾ in. cutter, each $1.30
No. 19. Nickel trimmings, 7 in. in length, 1¾ in. cutter, each 1.40

Low Angle

No. 60½. Low angle, block, 6 in. in length, 1⅝ in. cutter, each $1.10
No. 65½. Low angle, block, 7 in. in length, 1¾ in. cutter, each 1.20
No. 60. Nickel trimmings, 6 in. in length, 1⅝ in. cutter, each 1.25
No. 65. Nickel trimmings, 7 in. in length, 1¾ in. cutter, each 1.35

LOW ANGLE BLOCK PLANE



This plane is especially adapted for use in cutting across the grain on heavy work, where more power is required than can be obtained by the use of the ordinary block plane. The plane is fitted with patent adjustable throat, which enables the user to work equally well on hard or soft wood

No. 62. Low angle block, 14 in. in length, 2 in. cutter, each $2.85

One in a paper box

STANLEY

No. 101. Block plane, 3⅝ in. in length, 1 in. cutter, each $0.20

No. 102. Block plane, 5½ in. in length, 1¾ in. cutter, each $0.40
No. 103. Block plane, adjustable, 5½ in. in length, 1¾ in. cutter, each ..... .55

No. 110. Block plane, 7¼ in. in length, 1¾ in. cutter, each $0.55
*No. 120. Block plane, adjustable, 7¼ in. in length 1¾ in. cutter, each ..... .75

*Not carried in stock.

No. 220. Block plane, adjustable, 7½ in. in length, 1¾ in. cutter, each $0.75

No. 130. Block plane (double-ender), 8 in. in length 1¾ in. cutter, each $0.75

RABBET AND BLOCK PLANE

No. 140. 7 in. in length, 1⅝ in. cutter, detachable side, each $1.40

IRON PLANES

Stanley Rule & Level Co.'s

BULL-NOSE RABBET PLANE

No. 75. Iron stock, 4 in. in length, 1 in. cutter, each $0.40

ADJUSTABLE CABINETMAKERS' RABBET PLANE

These planes are designed for fine cabinet work where extreme accuracy is required. The sides and bottom being square with each other the plane will lie perfectly flat on either side and can be used right or left.

No. 90. Bull-nose, 4 in., 1 in. cutter, each.....$2.30

SIDE RABBET PLANE

No. 98, front No. 98, rear

No. 98. Right hand, full nickel plated, each . $1.00
No. 99. Left hand, full nickel plated, each . 1.00

Nos. 98 and 99 are 4 in. long, with ½ in. cutters

IMPROVED RABBET PLANE

No. 190. 8 in., 1½ in. cutter, with spur, each . $1.25
No. 191. 8 in., 1¼ in. cutter, with spur, each 1.25
No. 192. 8 in., 1 in. cutter, with spur, each . 1.25

CARRIAGEMAKERS' RABBET PLANE

No. 10. 13 in. in length, 2⅜ in. cutter, each $3.30
No. 10½. 9 in. in length, 2⅜ in. cutter, each 2.75

CABINETMAKERS' EDGE PLANE

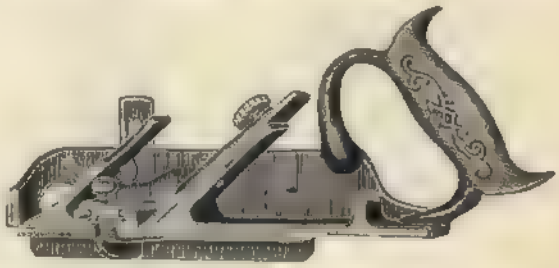
A useful tool for piano makers and all cabinet workers, for trimming inside work where space prevents the use of any other plane.

No. 97. Edge Plane, 2¼ in. cutter, each.....$2.20

IMPROVED CIRCULAR PLANE

No. 113. Adjustable circular plane, 1¾ in. cutter, each . $3.00

DUPLEX RABBET AND FILLETSTER PLANE



No. 78. 8½ in., 1⅝ in. cutter with adjustable spur, each $1.65

This plane has two seats for the cutter, one for regular work and the other bull nose.

One in a paper box

IRON PLANES

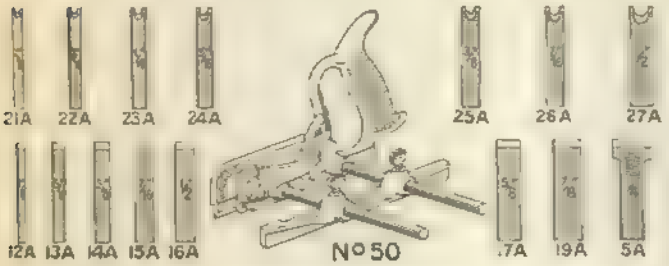
Stanley Rule & Level Co.'s

SKEW CUTTER FILLETSTER AND RABBET PLANE

No. 289. 8½ in. long, 1¾ in. cutter, each $1 75

Has extra wide skew cutter, adjustable spur. Smooths for right or cut hand work. Remove arms and fence and it is a skew cutter rabbet plane. Nickel plated.

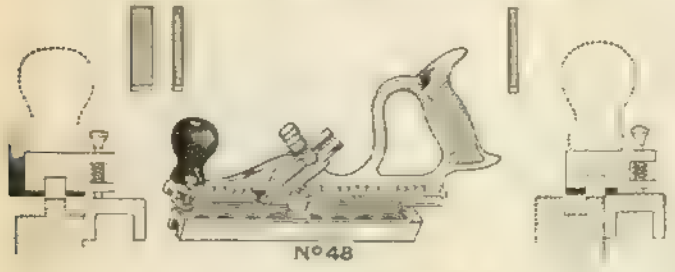
PLOW, BEADING AND MATCHING PLANES



No. 50. 9¼ in. long, nickel plated, each $5 00

Has 16 cutters, 7 plow and match tools, ⅛, 3/16, ¼, 5/16 and ⅜ in., 7 beading tools, ⅛, 3/16, ¼, 5/16, ⅜, ½ and ⅝ in. and a ¼ in. tonguing tool.

SWINGING FENCE MATCH PLANES

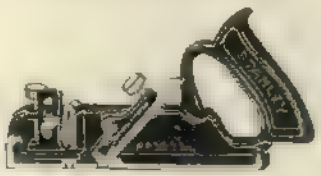


No. 48. Cuts ⅜ in. groove on boards ¾ to 1¾ in. centers on ⅜ in., each $2 75

No. 49. Cuts ⅜ in. groove on boards ½ to ¾ in. centers on ⅜ in., each 2 75

Has two plow cutters of the same width and one extra wide cutter. The fence in one setting exposes two cutters for cutting the tongue, and when reversed leaves only one exposed for cutting the groove. Nickel plated. Rosewood handle.

IRON DADO PLANES



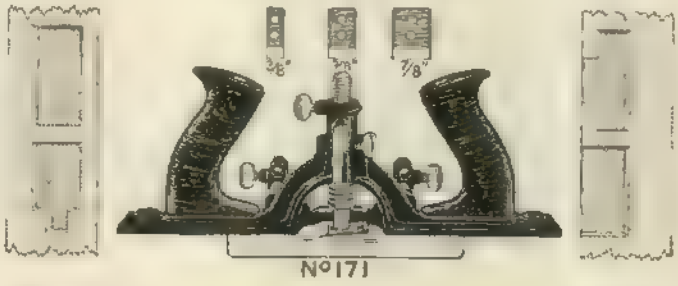
No. 39. 8 in. long, assorted cutters, each $1 65

Cutters ¼, ⅜, ½, ⅝, ¾ and *1 in.

*Not carried in stock.

In ordering planes give width of cutter desired. These planes have skew cutters, adjustable depth gauge and adjustable spurs, one on each side of the plane.

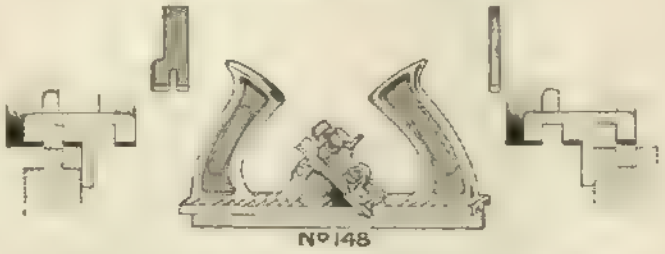
DOOR TRIM PLANE



No. 171. 9 in. long, japanned, each $2 75

Rosewood handles and three forged steel cutters, ¾, ⅝ and ⅜ in. wide. Will make mortises for butts, etc., up to a depth of ⅞ in. and a width of 3 in. Can be changed to make a router plane if desired.

DOUBLE END MATCH PLANE



No. 148. Cuts ¼ in. groove on boards ¾ to 1 in. centers, ⅜ in. nickel plated, each $2 20

Has two separate cutters, a plow and a tongue and both grooves are cut by working the tool in the same direction, by merely reversing it end for end.

EDGE TRIMMING PLANES

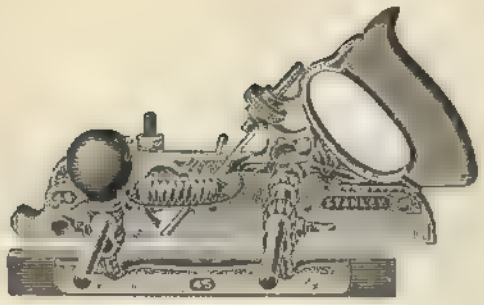
No. 95. 6 in. long, 2 in. cutter, nickel plated ..... each, $1 15

Designed especially for trimming the ends of boards, steel, wedging, etc. Has a right angle rest or guide from the cutting edge, and the cutter works on a skew. In the guide are two screw holes to which wood blocks of various bevels may be attached, enabling the user to make a slanting cut.

All planes one in a box

IRON PLANES

STANLEY ADJUSTABLE BEADING RABBET AND MATCHING



This plane combines a match stock and a sliding section so arranged that cutters of different widths can be used. It is fitted with adjustable fence or guide and a depth gauge, and also with spurs for use in working across the grain. Can be used right or left hand.

This plane embraces: (1) beading and center beading plane; (2) rabbet and fletster; (3) dado; (4) plow; (5) matching plane; (6) sash plane, and (7) a superior slitting plane

Each plane has seven beading tools (⅛, 3/16, ¼, 5/16, ⅜, 7/16, and ½ in.), ten plow and dado bits (⅛, 3/16, ¼, 5/16, ⅜, 7/16, ½, 5/8, ¾, and ⅞ in.), a slitting blade, a tonguing tool and a sash tool.

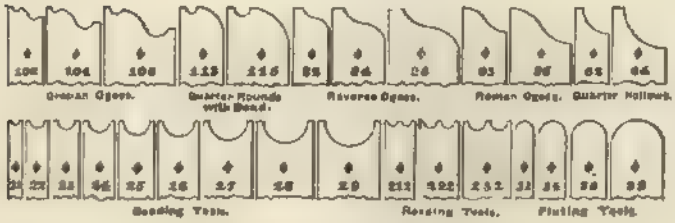
In addition to the 20 cutters sold with the plane, Nos. 2, 6, 9, 28, 29, 31, 32, 33, 34, 35, 36, 37, 38, 212, 213, 214, 215, 222, 223, 224, 225, 232, 233, 234 and 235 can also be used in No. 45, but the other cutters for No. 55 cannot be used in No. 45.

No. 45. Nickel-plated, with 20 tools, complete, each.....$9.00

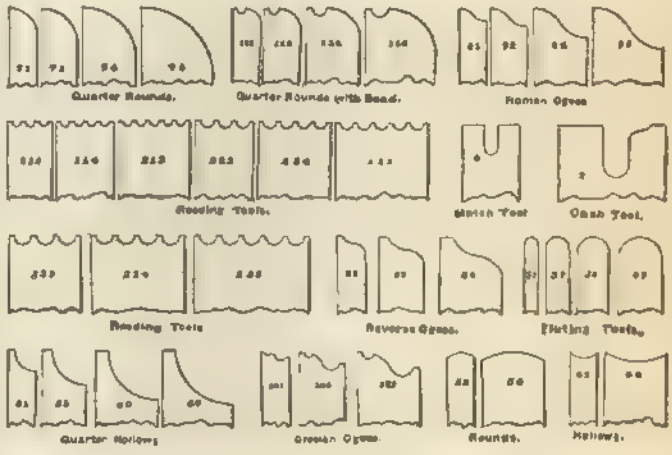
CUTTERS FOR STANLEY PATENT UNIVERSAL PLANES

Nos. 55 and 45

52 Cutters Furnished with No. 55 Plane



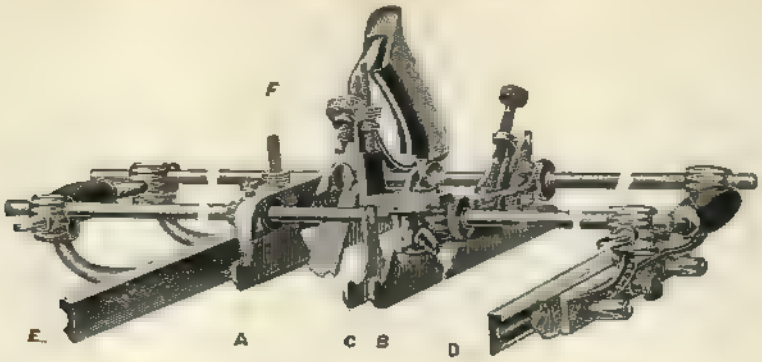
Extra Cutters Furnished on Special Order Only



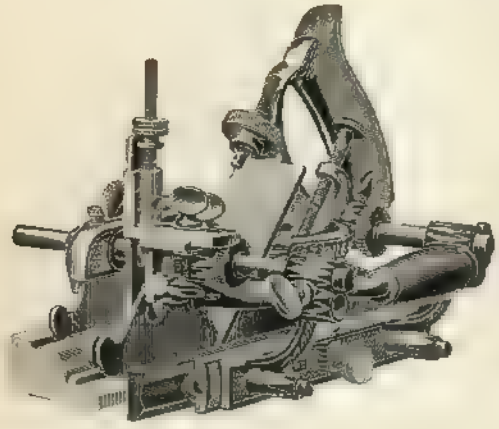
No.	Size	Style	Each	No.	Size	Style	Each	No.	Size	Style	Each
1.	1 in.	Sash tool	$0.50	37.	5/16 in.	Fluting tool	$0.30	86.	1 in.	Reverse ogee	$0.50
2.	1¼ in.	"	.50	38.	7/16 in.	"	.30	91.	3/16 in.	Roman "	.45
5.	1¼ in.	Match tool	.50	42.	3/16 in.	Hollow	.20	92.	7/16 in.	" "	.45
6.	7/8 in.	"	.50	43.	5/16 in.	"	.20	93.	5/8 in.	" "	.45
8.		Slitting tool	.30	44.	3/8 in.	"	.20	94.	3/4 in.	" "	.50
9.	1 3/16 in.	Filletster	.25	45.	7/16 in.	"	.20	95.	7/8 in.	" "	.50
10.	3/16 in.	Plow and dado tool	.15	46.	1/2 in.	"	.20	96.	1 in.	" "	.50
11.	5/16 in.	"	.15	47.	1 in.	"	.20	101.	3/16 in.	Grecian "	.45
12.	7/16 in.	"	.15	52.	5/8 in.	Round	.20	102.	7/16 in.	" "	.45
13.	9/16 in.	"	.15	53.	7/8 in.	"	.30	103.	5/8 in.	" "	.45
14.	5/8 in.	"	.20	54.	5/8 in.	"	.20	104.	3/4 in.	" "	.50
15.	7/8 in.	"	.20	55.	3/4 in.	"	.30	105.	7/8 in.	" "	.50
16.	1 in.	"	.20	56.	7/8 in.	"	.20	106.	1 in.	" "	.50
17.	5/8 in.	"	.20	57.	1 in.	"	.20	111.	3/8 in.	Quarter round with bead	.45
18.	3/4 in.	"	.20	61.	3/8 in.	Quarter hollow	.45	112.	1/2 in.	" "	.45
19.	7/8 in.	"	.25	62.	1/2 in.	"	.45	113.	5/8 in.	" "	.45
21.	3/8 in.	Bead tool	.15	63.	5/8 in.	"	.45	114.	3/4 in.	" "	.50
22.	7/16 in.	"	.15	64.	3/4 in.	"	.50	115.	7/8 in.	"	.50
23.	1/2 in.	"	.15	65.	7/8 in.	"	.50	116.	1 in.	"	.50
24.	9/16 in.	"	.20	66.	1 in.	"	.50	212.	3/16 in.	Reverse tool, 2 beads	.30
25.	5/8 in.	"	.20	71.	3/8 in.	" round	.45	213.	5/16 in.	" 3 "	.30
26.	7/8 in.	"	.25	72.	1/2 in.	" "	.45	214.	7/16 in.	" 4 "	.40
27.	1 in.	"	.25	73.	5/8 in.	" "	.45	215.	5/8 in.	" 5 "	.50
28.	5/8 in.	"	.30	74.	3/4 in.	" "	.50	222.	3/16 in.	" 2 "	.30
29.	3/4 in.	"	.30	75.	7/8 in.	" "	.50	223.	5/16 in.	" 3 "	.30
31.	1/16 in.	Fluting tool	.30	76.	1 in.	" "	.50	224.	7/16 in.	" 4 "	.40
32.	3/16 in.	"	.30	81.	3/8 in.	Reverse ogee	.45	225.	5/8 in.	" 5 "	.50
33.	5/16 in.	"	.30	82.	7/16 in.	" "	.45	232.	1/4 in.	" 2 "	.30
34.	7/16 in.	"	.30	83.	5/8 in.	" "	.45	233.	1/4 in.	" 3 "	.30
35.	9/16 in.	"	.30	84.	3/4 in.	" "	.50	234.	1/4 in.	" 4 "	.40
36.	5/8 in.	"	.30	85.	7/8 in.	" "	.50	235.	1/4 in.	" 5 "	.50

IRON PLANES

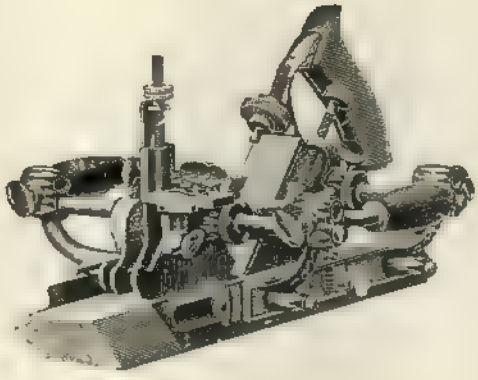
STANLEY'S PATENT UNIVERSAL PLANE



Complete



As Moulding, Match, Sash, etc.

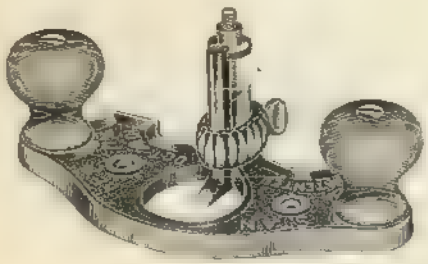


As Chamfer

No. 55. Stanley's universal plane complete with 52 cutters . . . . . each, $18.00
Set of 52 extra cutters for No. 55 . . . . . " 6.00

This plane consists of: [1] A main stock (A) with two sets of transverse sliding arms, a depth gauge (F) adjusted by a screw and a slitting cutter with stop [2] A sliding section (B) with a vertically adjustable bottom [3] An auxiliary center bottom (C) to be used as an extra support or stop when needed. This bottom is adjustable both vertically and laterally. [4 and 5] Fences (D) and (E). Fence (D) has a lateral adjustment by means of a fine screw and the rosewood guides can be tilted to any angle up to 45° Fence (E) can be reversed for center beading wide moldings. [6] An adjustable stop not shown in cut, to be used in beading the edges of matched boards. [7] Fifty-two cutters are each as follows: Nos. 1, 5, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 21, 22, 23, 24, 25, 26, 27, 28, 29, 32, 34, 36, 38, 43, 44, 45, 47, 53, 54, 55, 57, 62, 64, 73, 75, 82, 84, 86, 93, 95, 102, 104, 106, 113, 115, 212, 222 and 232. (See preceding page)

WOODWORKERS' ROUTER PLANES



Open Throat

Attachment for No. 71 Plane

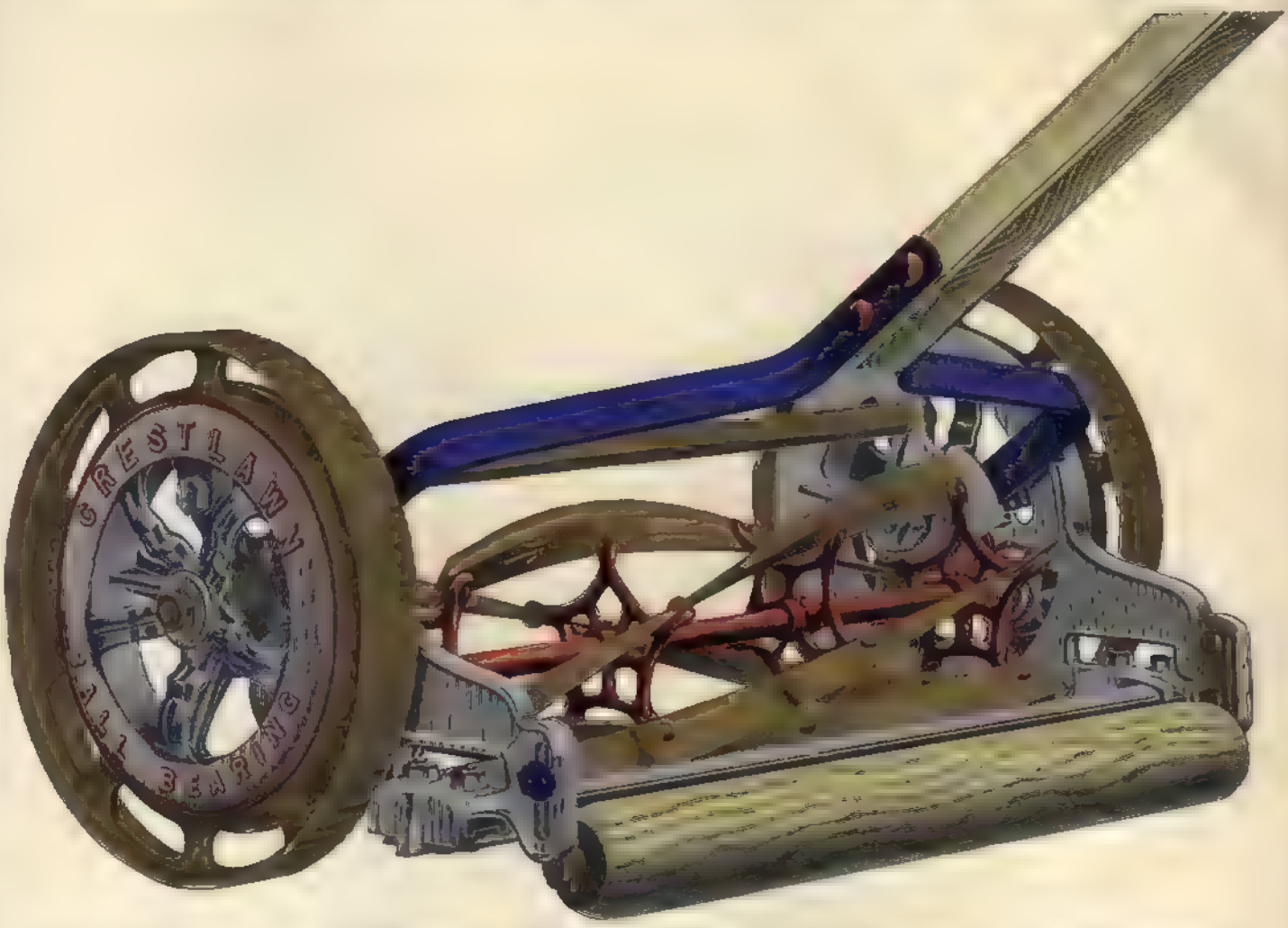
Closed Throat

No. 71. Nickel-plated stocks, with steel bits (¼ and ½ in.) . . . . . each, $2.05

The attachment shown above is furnished with No. 71 plane. It can be substituted for the collar that holds the cutter when the work requires a plane with a closed throat.

No. 71½. Nickel-plated stock with steel bits (¼ and ½ in.) . . . . . each, $1.65
Cutters for above planes (¼ or ½ in.) . . . . . " .30

One in a paper box



Ball-Bearing Drive Wheels

CRESTLAWN BALL BEARING

Automatic Ball-Bearing Adjustment

You frequently have a customer ask for the best lawn mower made. Sell him the Crestlawn. WHY? Because its wheels as well as its revolving knives turn on ball bearings. No other mower is so constructed and it is, therefore, the lightest and easiest-running lawn mower made. Prove it yourself by removing the small internal gear and spin the wheel with your hand. It will run for five minutes.

Then it has the strongest frame construction of any mower made. The cutter bar is secured to the four-squared rigid frame by a patented interlocking adjustment that is absolutely impossible to be knocked or twisted out of alignment. No other mower has this adjustment.

The self-adjusting ball bearings in the revolving cylinder take up the wear instantly, without any attention on the part of the operator, are always ready for use, and are indestructible.

Blades of razor steel, tempered in oil and self-sharpening A ¾-inch reel shaft and double-riveted end spiders prevent the reel from being sprung and adds increased momentum. It has every good thing that all mowers have and many that others have not.

Drive wheels 11 inches, and reel 6 inches in diameter with five cutting blades.

For use in parks where the grass is cut infrequently, we can furnish this mower with four blades, under the name, Crestlawn Junior.

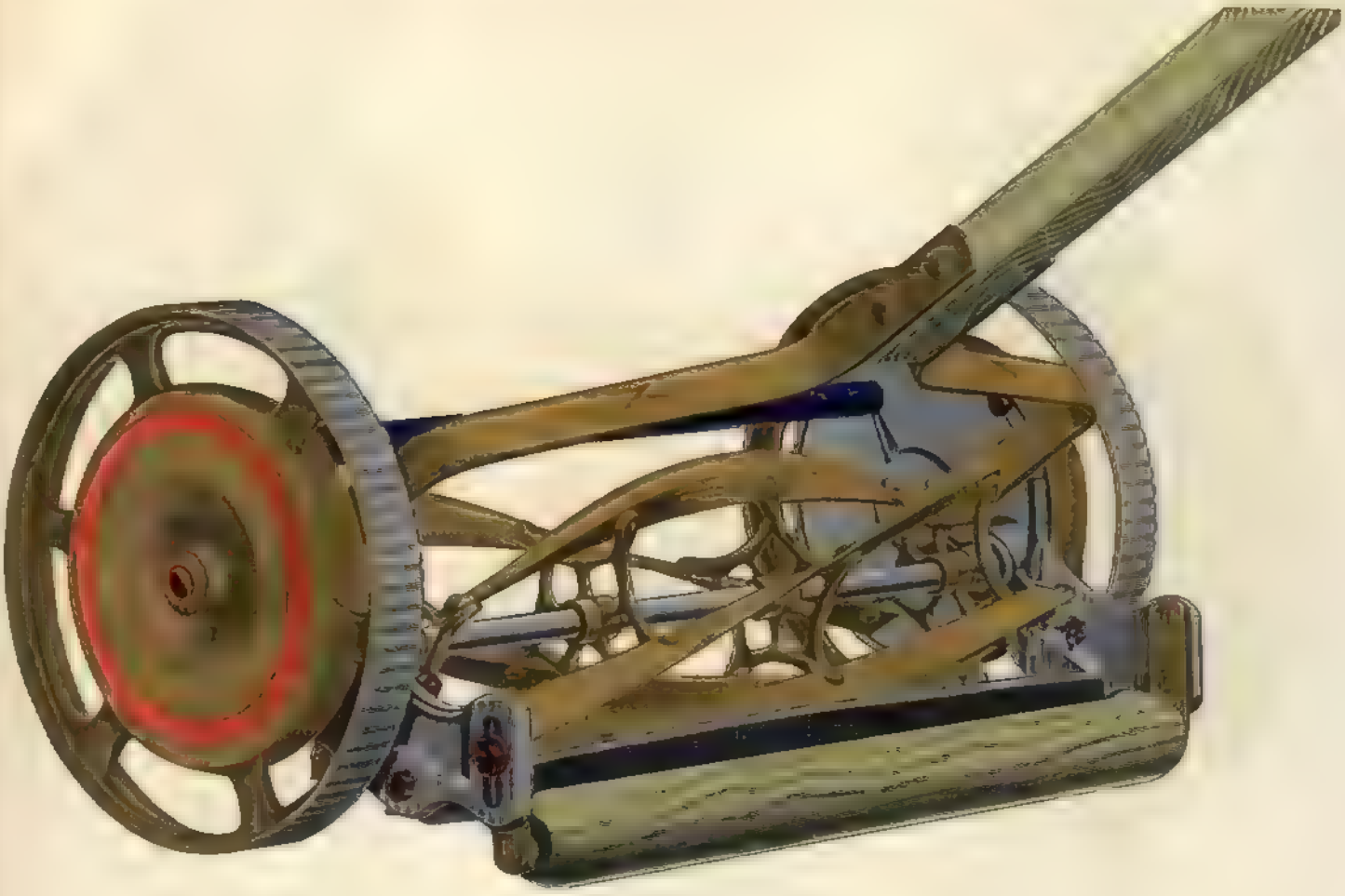
Also made in 30-inch width of cut, with either four or five blades, equipped with proper attachments for a one-horsepower mower.

Sizes	14-inch	16-inch	18-inch	20-inch
	$16.00	$16.50	$17.00	$17.50

The Construction Defies Destruction

EVERY BEARING BALL BEARING

The World's Greatest Lawn Mower



CUT EASY BALL BEARING

This mower is not only BALL BEARING, but the cones are of high-speed steel and tempered so hard that dealers are requested to guarantee that they will never show the slightest wear during the life of the lawn mower. This will help you effect sales and we will keep the guaranty good.

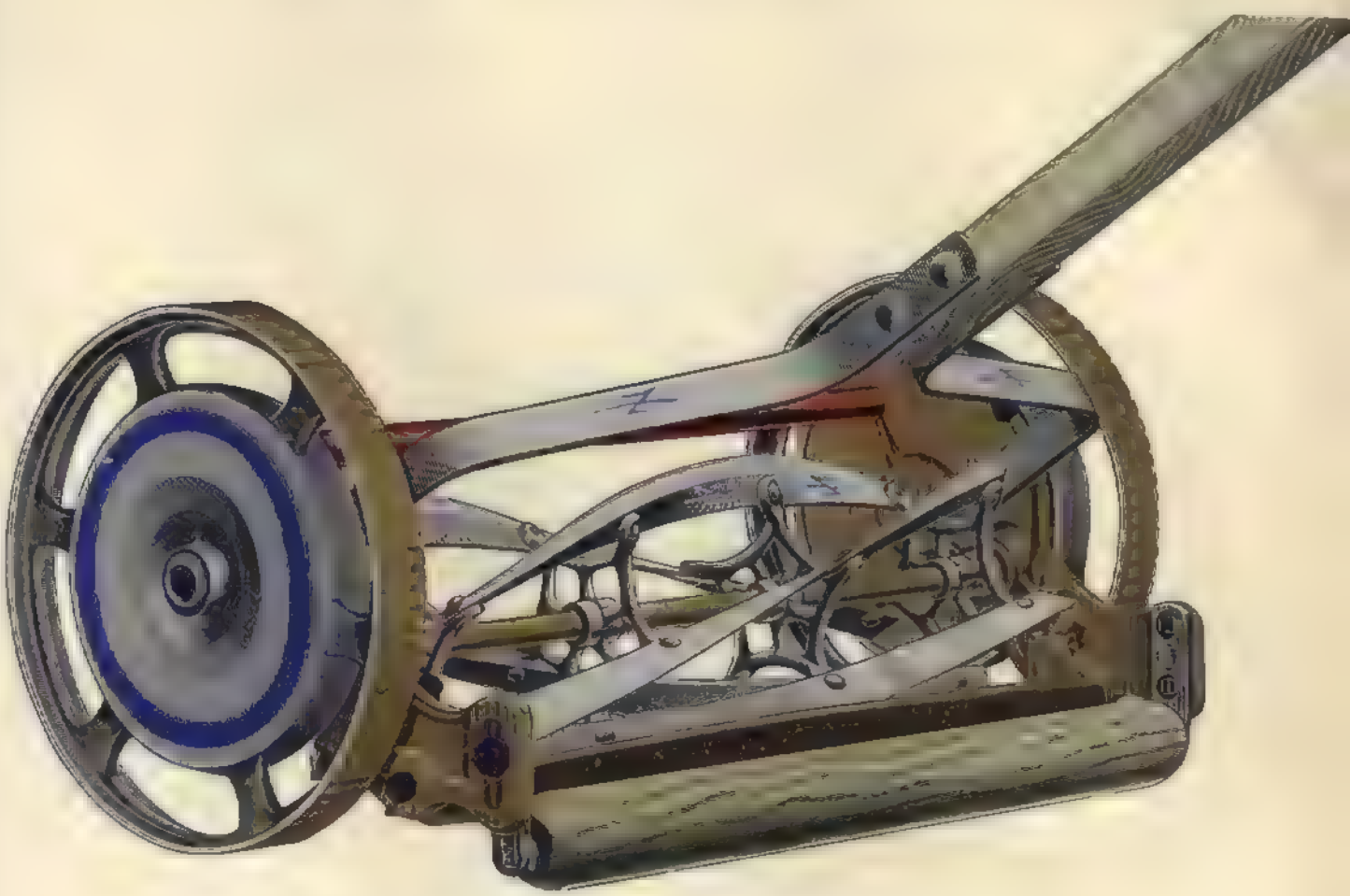
Ask any skilled mechanic to examine this mower. He will tell you that its parts are as accurately fitted as those of the finest sewing machine. We take a "second cut" on every operation, bringing dimensions to the thousandth part of an inch.

Five cutting blades of finest crucible steel, oil tempered, shear cutting, self-sharpening. A ¾-inch reel shaft of cold-rolled steel and double-riveted end spiders, increasing the momentum and making it impossible to spring the reel.

Blades ground under water just as finest cutlery is finished.

Wheels, 10¼ inches; reel, 6 inches in diameter.

Sizes	14-inch	16-inch	18-inch	20-inch
	$12.00	$12.50	$13.00	$13.50



LAWN KING PLAIN BEARING

To those who prefer a plain-bearing mower we offer this mower as the best that can be built. Some day, when you have half an hour, take it apart. Note the precision of workmanship. Every measurement is to the thousandth part of an inch. The distance of one shoulder of the cross-rod to the other is exactly the distance from one recess to the other in the end of the cutter-bar. Thus the machine is "four-squared" to meet any duty or to stand any blow. You can easily put the mower together again. The parts fit perfectly. And the lesson will do you good. You will be a better lawn mower salesman than ever before. Your heart will be in the work.

It has brass bearings with a lock-nut device for taking up all wear.

Screw adjustments throughout.

Five blades of finest crucible steel, tempered in oil, shear cut and self-sharpening. Blades ground under water by the same processes used in the manufacture of finest cutlery

A ¾-inch reel shaft of cold-rolled steel and double-riveted end spiders, increases the momentum and makes it impossible to spring the reel.

Drive Wheels, 10¼ inches; reel, 6 inches in diameter.

Sizes	14-inch	16-inch	18-inch	20-inch
	$11.00	$11.50	$12.00	$12.50

ARCH CITY BALL BEARING

A strictly high-grade mower and one of the most beautiful and graceful designs ever produced. Drive wheels, 10½ inches in diameter, which revolve on steel bearings. The shrubrod runs through the center of the mower, forming an axle for the wheels.

Revolving cutter or reel has four knives of highest-grade crucible steel, oil tempered, spirally formed and self-sharpening. Reel, 6 inches in diameter.

Reel shaft is made of best cold-rolled steel shafting. Ball-bearing parts fully guaranteed, and the cones are so hardened that they will never show the slighest wear.

Accurately fitted and adjusted throughout. Screw adjusting.

All wood parts are of carefully-selected stock and lacquered to protect from weather.

Sizes	14-inch	16-inch	18-inch	20-inch
	$9.00	$9.50	$10.00	$10.50

SELF-ADJUSTING BALL BEARINGS

DANDY BALL BEARING

Drive wheels, 9 inches in diameter, turning on steel bearings. Revolving reel is 5½ inches in diameter and has **four knives** of highest-grade crucible steel, spirally formed and self-sharpening. Cutting knives are attached to the reel shaft by means of malleable iron spiders, and the shaft is made of cold-rolled machinery steel.

The ball-bearing cones are made of best quality tool steel and tempered glass hard. Automatically adjusted.

Perfectly machined and fitted and parts are interchangeable. Screw adjusting cutterbar.

This mower is very graceful in outline, and one of the easiest-running machines on the market. Guaranteed, of course.

Sizes	14-inch	16-inch	18-inch
	$7.50	$8.00	$8.50

LARK PLAIN BEARING

A beautiful machine, very graceful in appearance, light and easy running. Drive wheels full 9 inches in diameter, turning on steel bearings.

Four reel blades of highest grade crucible steel, spirally formed and positively self-sharpening.

Reel is 5½ inches in diameter and is made with brass bearings so that any wear can be easily taken up and the mower kept in perfect adjustment at all times.

Quality and workmanship first-class throughout.

Sizes	14-inch	16-inch	18-inch
	$6.00	$6.50	$7.00

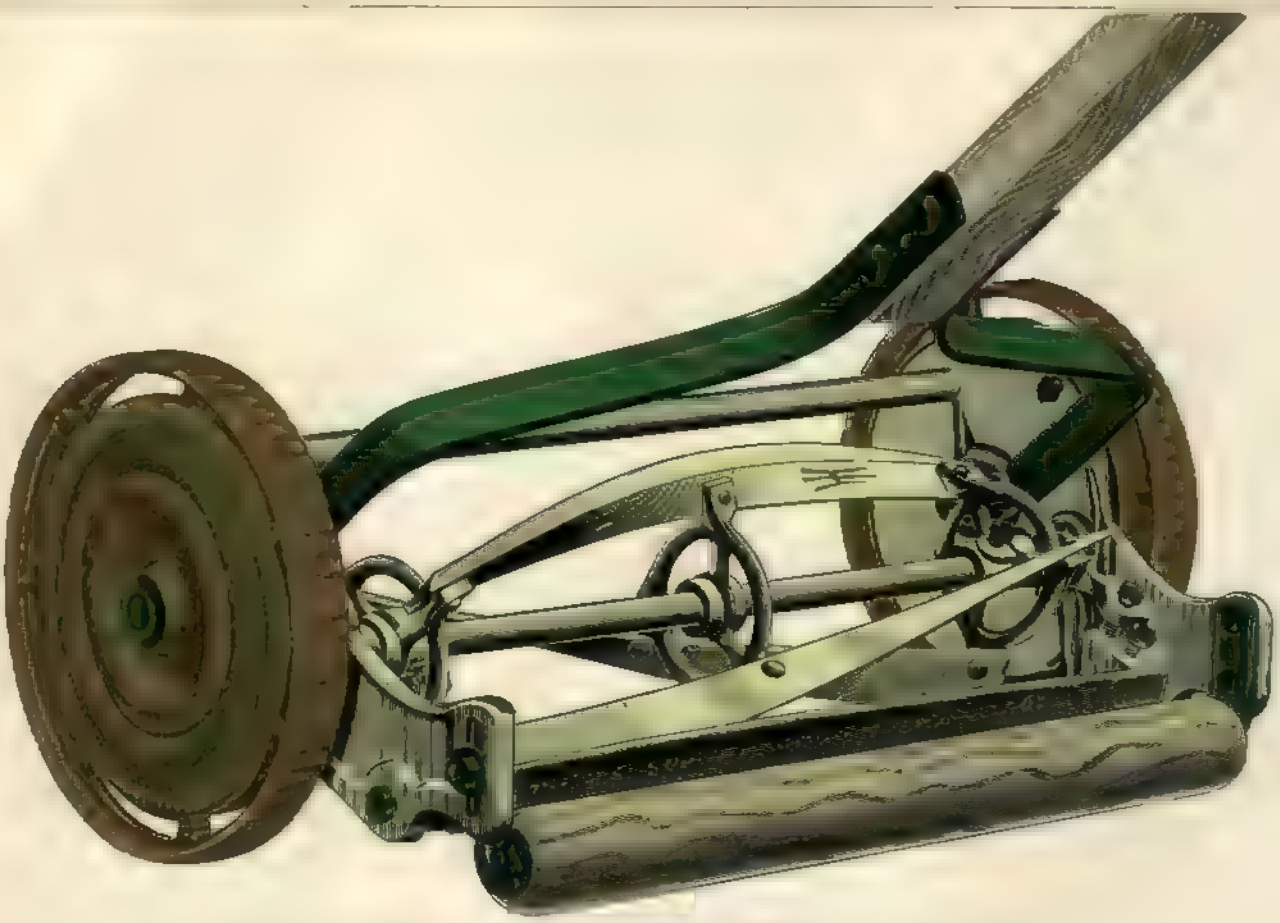
SENATOR PLAIN BEARING

This machine is a popular design. The drive wheels are full 9 inches in diameter and revolve on steel bearings. The reel shaft is made of machinery steel and the 5½-inch diameter reel has three cutting knives of good quality steel which are spirally formed so as to give a good, clean, shear cut.

All wear can be taken up by means of brass bushings and lock-nut set screws. The cutting parts are screw adjusted.

Nothing but high-grade material is used in the construction of this mower and all parts are accurately machined and fitted. A very light, graceful and easy-running mower.

Sizes	14-inch	16-inch	18-inch
	$5.00	$5.50	$6.00



CLOVER LEAF PLAIN BEARING

You will want a few of these mowers to supply a popular demand, and if you do not say they are the best low-priced mowers you have ever seen, send them back.

The design is new and attractive. Revolving reel has three knives of high-grade blade steel, carefully tempered and spirally formed.

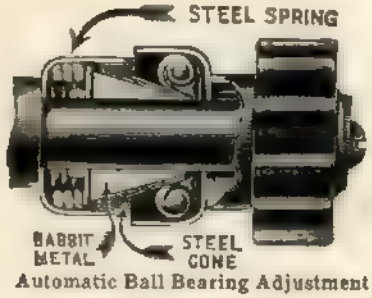
The reel shaft is made of machiney steel and has adjustable brass bushings for taking up wear.

All parts are machined and fitted to insure accurate construction.

This mower has screw adjustments throughout and is popular on account of its lightness of draft, features which are common to all of our mowers.

Drive wheels, 8 inches. Reel, 5½ inches in diameter.

Sizes	14-inch	16-inch	18-inch
	$4.50	$4.75	$5.00



Automatic Ball Bearing Adjustment

The Reel Bearings on all our ball-bearing mowers are equipped with a **New Patented Automatic Adjustment.** This is the most important invention of recent years in lawn mower construction. It consists of a case-hardened steel spring working against a self-contracting babbitt sleeve, around the shaft and inside of the cone. At the instant all looseness is taken up by the spring, the sleeve grips the shaft thus preventing any further pressure than is required for the most delicate adjustment, permitting the reel to revolve with perfect freedom.

Throughout the life of the mower this adjustment continues to accommodate itself to conditions, keeping the bearings always adjusted to a nicety, without the slightest attention from the operator; the sleeve instantly releasing when looseness occurs from any cause and again tightening on the shaft the moment all wear is taken up by the spring.

No mechanism depending on the sense of touch can by any possibility be so accurately adjusted. In fact, devices for hand adjustment often become the ruin of good mowers by those who do not understand. While this patented device we use automatically adjusts, it is completely enclosed so that an ignorant operator can not get at it even though he tries to do so. **No screws to lose out. Always ready for service.**

Only machinery of the very highest efficiency finds a place in our factory. Only the very highest class of material is used in our processes. **We offer only high-grade "four-squared" fitted lawn mowers, and by reason of factory economies and large volume of output, we can supply this high-grade production at prices practically as reasonable as others must ask for inferior machines. The largest output of any lawn mower factory in the world.**

TINNERS' SHEARS

ZENITH, STRAIGHT

Drop Forged, Refined Iron; Blades laid with High Grade Steel, Hardened and Tempered; Handles shaped to prevent cramping Hand.

Nos.	10Z	9Z	8Z	7Z
Cut, In.	2½	3	3½	4
Weight, Lbs.	1	1½	2	2½
Per Pair	$1.40	1.50	2.00	2.50

NIAGARA, STRAIGHT

Drop Forged, Steel Laid Blades, Hardened and Tempered

Nos.	10N	9N	8N	7N	6½N
Cut, In.	2½	3	3½	4	4½
Weight, Lbs.	1	1½	2	2½	3
Per Pair	$1.40	1.50	2.00	2.50	3.00

HOUSEHOLD, STRAIGHT

Per Pair

No. 3H—Length 10¼ in., Cut 2¾ in., Polished Blades, Japanned Handles; Forged, Steel-Laid Blades.....$1.00

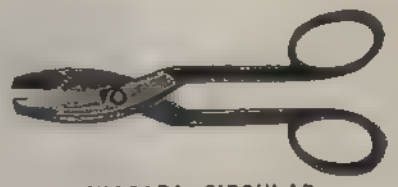
Half Dozen in a Box

Weight 10 Lbs. per Dozen

SUFFALO, COMBINATION

These Shears will cut Curves, Scrolls and Irregular Shapes as well as Straight Work; Drop Forged Steel, Cast Steel Laid Blades, Hardened and Tempered.

Nos.	19	18	17
Cut, In.	3	3½	4
Weight, Lbs.	1½	2	3
Per Pair	$1.50	2.00	2.50



NIAGARA, CIRCULAR

Drop Forged, Steel Laid Blades, Hardened and Tempered.

Nos.	10C	9C	8C	7C
Cut, In.	2½	3	3½	4
Weight, Lbs.	1	1½	2	2½
Per Pair	$2.25	2.50	3.00	3.50

HEINISCH VULCAN

Designed for Cutting Curves and Irregular Shapes; Especially adapted for Cornice Work; equally good for straight work.

Per Pair

No. 133—Drop Forged Steel, Tool Steel Laid Blades, Tempered and Polished; Japanned Handles; 13 in. Over-all, 3 in. Cut.....$3.50

One in a Paper; Weight 1¾ Lbs. per Pair

NIAGARA DOUBLE CUTTING

Will cut apart Cylinders of Sheet Metal, Stove Pipe, etc., without leaving ragged edges; also for cutting off bottoms of cans, pails, etc.; Center Blade is pointed to start the cut.

Per Pair

No. 13½—Length Over-all 13½ in.; Drop Forged; Solid Tool Steel Center Blade; Steel Laid Outer Jaw..$3.00

Weight 2¼ Lbs. per Pair

BENCH SHEARS, RIGHT HAND

Cast Steel, Polished Blades, Japanned Handles, Bent Heels

Nos.	5	4	3	2
Cut, In.	7	8	8¾	8¾
Cuts Sheets, Ga.	21	20	19	22
Length, In.	27½	30½	33	35
Weight, Lbs.	9	12	15	18
Per Pair	$4 00	6.00	8.00	7.00

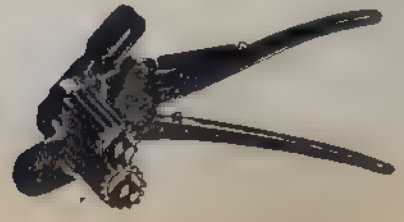
Nos.	1	0	00
Cut, In.	9	10½	12
Cuts Sheets, Ga.	30	18	16
Length, In.	39	44	48
Weight, Lbs.	23	28	36
Per Pair	$8 00	12.00	13.50

Bench Shears as regularly made have Right Hand cut, that is, the lower blade is on the right side of the shears. Left Hand Shears can be furnished when desired, at an additional cost, and for shipment from factory.

THE HANDLE OF SNIPS

Left Hand Snips, the ordinary kind, have the handles shaped for the right hand, and they cut at the left side of the upper jaw. They are shown above, and will be sent unless otherwise ordered. Right Hand Snips also have the handles shaped for the right hand, but they cut at the right side of the upper jaw, like Bench Shears. Snips for Left Handed Workmen have the handles shaped for the left hand and the jaws for right-hand cut.

HAND CRIMPERS



BLUMER

Just the thing to have when out setting up Stoves, Conductor Pipe, etc. With it, one can crimp Pipe very quickly and easily When the Handles close, the Rolls are revolved, making one Crimp at each closing and automatically drawing the Pipe through the Crimping Rolls.

Each

No. 15—Blumer Hand Crimper, makes 1 in. Crimp on 24 Gauge and Lighter Pipe; Interchangeable Steel Parts, Length 9 in. $3.50

One in a Paper; Weight 1¾ Lbs. Each

TINNERS' TOOLS

TINNERS' RIVET SETS AND HEADERS

Cast Steel, Black Japanned

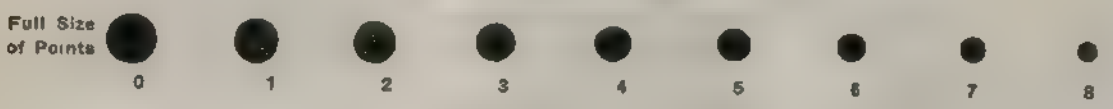
Size Nos.	00	0	1	2	3	4	5	6	7	8
For Iron Rivets, Lbs.	14	10 & 12	8	6	4 & 5	2½ & 3	1¾ & 2	1½	1¼	10 & 12 Oz.
For Copper Rivets, Nos.		5	6	7	8	9	10 & 11	12	13	14
Weight Each, Lb.	⅛	⅜	7/16	½	9/16	⅝	¾	⅞	1	1⅛
Each	$0.75	.75	.68	.63	.50	.50	.37	.37	.32	.32

Half Dozen in a Paper Box

TINNERS' HOLLOW PUNCHES

Size Hole, In.	3/8	½	5/8	¾	7/8	1	1¼	1⅜	1½	1¾	2	2¼	2½
Weight Each, Lbs.	¼	⅜	½	5/8	¾	⅞	1¼	1⅓	1⅝	2	2⅓	2½	2⅝
Each	$0.38	.50	.63	.75	.88	1.00	1 25	1 38	1 50	1.75	2.50	2.81	3.13

Open Stock



TINNERS' SOLID PUNCHES

Cast Steel, Square Shank; 4½ In. Long

All Sizes	Per Dozen
Nos.	0	1	2	3	4	5	6	7	8	$1.44
Diam. of Point	9/32	8/32	7/32	6/32	5/32	4/32	3/32	2/32	1/32	
Size Shank, In.	3/8	7/16	7/16	7/16	7/16	7/16	7/16	1/4	1/4	
Weight Dozen, Lbs.	2	1⅜	1¼	1¼	1¼	1⅛	1⅛	1	¾	

One Dozen in a Box

TINNERS' PRICK PUNCHES

No. 440—⅜x4 in Solid Cast Steel; Round, Knurled Shank, Straw Colored Head and Point ..... Per Dozen $1.44

One Dozen in a Box; Weight ⅝ Lb. per Dozen

TINNERS' CENTER PUNCHES

No. 455—7/16x4 in Solid Cast Steel; Round, Knurled Shank, Straw Colored Head and Point..... Per Dozen $1.44

One Dozen in a Box; Weight ⅝ Lb. per Dozen

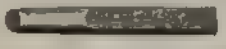
TINNERS' WIRE CHISELS

Cast Steel, 5 In. Long

For Cutting off Small Work, starting Hole for Snips, etc.

Width, In.	⅛	3/16	¼	5/16	⅜	7/16	½
Wt. Each, Oz.	⅛	3/16	¼	5/16	⅜	7/16	½
Per Dozen	$0 96	1.08	1.20	1.32	1.44	1.56	1.68

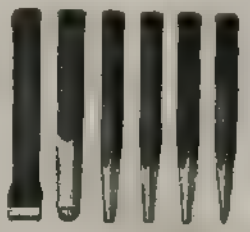
One Dozen in a Box



TINNERS' LANTERN CHISELS

No. 33—Cast Steel, ½ In. Wide, 5 in. Long; For Cutting Holes in Eaves Trough, or any Other Circular Work ..... Per Dozen $1.44

One Dozen in a Box, Weight 2 Lbs per Dozen



TINNERS' CHISELS AND PUNCHES IN SETS

All 5 In. Long, Solid Cast Steel

No. 44—Consists of One ⅜ in. Wire Chisel; One ½ in. Lantern Chisel; Three Solid Punches, Sizes 9/32, 8/32, 7/32 in., and One ¼ in Prick Punch ..... Per Set of 6 $0.72

One Set in a Box; Weight ⅞ Lb. per Set

TINNERS' MACHINES

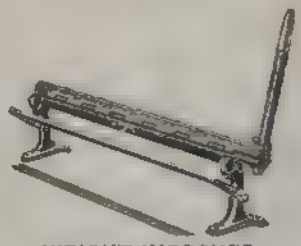
SHEET IRON FOLDERS

For folding edges of sheets already formed into cylindrical shape; For 24 Gauge Material and lighter

NIAGARA ADJUSTABLE

Will produce a Lock of uniform width the entire length of sheet, even if there is a variation in the hardness of the material; has an Adjustable Gauge for locks from 1/4 to 3/8 inches.

	Each
No. 30N—30 in.; Weight 90 Lbs.	$14 00



WRIGHT IMPROVED

Turns Locks 1/16, 1/8, 1/4 and 3/8 in.; By use of Rod and Steel Strips under the Plate, Wider Locks May be Turned and Sheets Longer than the Machine used; Will also Fold Straight Sheets.

No. 30W—30 in. Wide; Complete with Attachment	$15.00

Weight 80 Lbs Each

NIAGARA KEYSTONE BAR FOLDERS

For folding Tin and other light materials up to 24 Gauge; Folds narrow or wide locks at various angles, forms square joints and turns rounded edges ready to insert a wire; the Gauge is adjustable by means of a Knob allowing Gauge to be quickly set without measuring or trying.

Nos.	Width	Turns Locks	Weight	Each
21K	21 in.	1/16 to 1	120 Lbs.	$30.00
30K	30 in.	1/16 to 1	220 Lbs.	40.00

WOOD ROOFING FOLDERS

Improved, with Gauge, Hinged Wood Wings, Steel Blades; Iron carrying Handle, For Flat Seam Tin Roofing.

	Each
No. 20—For 20 in. Tin; Wt. 7½ Lbs.	$3.50
No. 30—For 30 in. Tin; Wt. 15 Lbs.	5.00

HEAVY SHEET IRON FOLDERS

For 20 Gauge Material and Lighter; a strong accurate machine with Adjustable Gauge

Nos.	Width	Turns Locks	Weight	Each
130	30 in.	1/16 to 1	190 Lbs.	$30.00
142	42 in.	1/16 to 2	390 Lbs.	50.00
148	48 in.	1/16 to 2	450 Lbs.	60.00

Not carried in Stock; Shipped Direct from Factory

NIAGARA WAUGH CIRCLE SHEARS

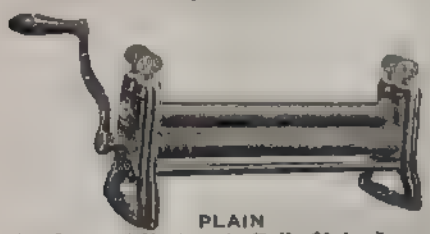
For 22 Gauge Material or lighter; Will cut round discs of sheet steel and can also be used for straight cutting.

Nos.	Will Circle	Cutting Head	Weight	Each
1	3 to 15 in.	9¾ in.	100 Lbs.	$33.00
2	3 to 20 in.	9¾ in.	110 Lbs.	38.00
4	3½ to 48 in.	9¾ in.	310 Lbs.	65.00

Not carried in Stock; Shipped Direct from Factory

STOVE AND TIN PIPE FORMERS

For forming light Sheet Metal into Cylindrical Shapes, Smooth Steel Rolls without indentations or imperfections



PLAIN

Set Screw Adjustment; Rolls 30 in. Long

	Each
No. 1P—1¾x30 in. Rolls; Weight 118 Lbs.	$18.00
No. 2P—2 x30 in Rolls; Weight 140 Lbs.	19.00

SQUARING SHEARS

With Iron Drop Tables

For Squaring, Stripping and Cutting Sheets, either Square or at any desired angle without marking the sheets.

	Each
No. 15S—Width of Cut 30 in.; Complete with Front, Bevel and Side Gauges, also Micrometer Back Gauge; the Bed is marked with a Graduated Scale in 1/16 inches	$50.00

Weight 530 Lbs. Each

NIAGARA RING AND CIRCLE SHEARS, IMPROVED

Capacity 22 Gauge Material and lighter; Cuts internal Holes or Circles without cutting through edge of sheet; can be used for straight cutting

Nos.	11	13
Depth Throat, In.	9	9
Depth Circle Arm, In.	16	30
Will Circle from, In.	3½ to 32	3½ to 40
Weight, Lbs.	180	250
Each	$30 00	40.00

Not carried in Stock; Shipped Direct from Factory

Slip Roll

End of Upper Roll can be lifted out and is held suspended while finished work is being removed.

	Each
No. 1S—1¾x30 in. Rolls; Weight 140 Lbs.	$19.00
No. 2S—2 x30 in. Rolls; Weight 160 Lbs.	20.00

TINNERS' STAKES

Wrought Iron Stake, Polished Steel Faces

DOUBLE SEAMING STAKES

Both Arms Round and Polished; With Flat Faced, Beveled Elliptical Ends

For Small Ware, such as Coffee Boilers, etc., where a Special Bevel is required

Each

No. 1D—Long Arm 17 in., with 3⅝x1⅛ in. End; Short Arm 12 in. with 3⅛x2 in. End; Weight 40 Lbs.....$9.00

No. 2D—Each Arm, 11 in. Long 3¼x1⅝ in. and 2⅝x1½ in. Ends; Weight 32 Lbs. Each 8.00

Not Carried in Stock; Will order Special

BEAKHORN STAKES

One Arm Flat, with 2 in. Face, the Other Round and Tapering

For Forming Long Square Work and all Round Stuff; Double Seaming, Square Boxes, etc.

Nos.	1	2	4
Length Sq. Arm, In...	20	18	18
Length Rd. Arm, In...	18	17½	16½
Wt. Each, Lbs.....	50	40	30
Each $15.00		13.25	10 00

Open Stock

No. 1, not carried in Stock; Will order Special

BLOWHORN STAKES

One Arm Round, Long and Tapering; The Other Arm Oval Faced and Tapering

Large End for forming Covers, Small End for Cylinders, Taper Tubes, Dinner Horns, etc.

Each

Large Arm 9 in., Small Arm 17½ in. Long; Weight 14 Lbs. Each.....$5.00

SQUARE HEAD STAKES

For Square Work, Double Seaming Bottoms, etc.

Each

Face 2⅝x4½ in.; Weight 11 Lbs.....$3.00

HATCHET STAKES

For Seaming Pitched Covers, Round or Square; Turning Seams when Folder cannot be used, etc.

Nos.	1	2	3	4	5
Blade, In.	16	14½	13	11	9
Wt. Ea., Lbs..	13	10	9	7	5
Each $5 00		4.25	3.50	2.75	2.25

CANDLE MOULD STAKES

Both Arms Round and Tapering

For Turning and Seaming Small Cylinders, Tapering Tubes, Rings, etc.

Long Arm 18 in., Short Arm 8½ in.; Weight 8 Lbs. Each.....$2.75

NEEDLE CASE STAKES

One Arm Square, the Other Round; Both Tapering

For Forming Smallest Tubes, Small Rings, Square Stuff, etc.

Square Arm 8 in., Round Arm 10½ in. Long; Weight 3 Lbs. Each.....$2.25

CREASING STAKES

For Hand Creasing, Wiring and Square Work, etc.

Each

Length 14½ in.; Weight 12 Lbs. Each.$4.00

Open Stock

CREASING STAKES WITH HORN

For Hand Creasing, Wiring, Forming Small Tubes and Square Work

Round Arm 9½ in., Square Arm 6½ in. Long; Weight 13 Lbs. Each.....$4.50

Cast Iron Stakes, Polished Steel Faces

ROUND HEAD STAKES

For Riveting Handles on Covers, etc.

Diameter Head 2¾ in., Length 15½ in.; Weight 10 Lbs. Each.....$1.25

CONDUCTOR STAKE

Cast Iron, Polished Arms or Faces; Both Arms Round

For Locking Seams of Conductor Pipe

No. 1C—Large Arm 15x3¼ in., Small Arm 11½x1¼ in.; Weight 30 Lbs. Each $4 00

No. 2C—Large Arm 14x1¾ in., Small Arm 10x1¼ in.; Weight 20 Lbs. Each 3.00

No. 2C, not carried in Stock; Will order Special

DOUBLE SEAMING STAKES

For Double Seaming All Kinds of Work

Per Set

With Four Heads, 1 Flat Faced Round Head 6 in. Diam., 1 Round Faced Oblong Size 5¾x4 in., 1 Flat Faced Square, Size 5x4¾ in.; 1 Oval Faced Oblong, Size 9½x3 in.; Size Arm 22x4 in. Square; All Heads Will Fit in End or Top Side of Arm.....$9.00

One Set in a Box; Weight 100 Lbs. Each

TINNERS' STAKES AND TONGS

Cast Iron
Polished Faces

HOLLOW MANDRELS

A Bench Mandrel for general purposes, Forming, Riveting, Seaming, etc.; can be swung and secured in any position on bench most favorable to light or work

	Each
No. 040—40 in Long, Flat Face 6 in Wide, Round Face 4 in Wide, Weight 50 Lbs Each	$5.50

SOLID MANDRELS

For Heavy Riveting, Seaming Small Pipe, etc.

Reversible, One Flat and One Round Face

	Each
No. 0—40 in. Long to Standard; Weight 80 Lbs. Each	$6 00
No. 1—34 in. Long to Standard, Weight 60 Lbs. Each	5.00

Open Stock

ADAMS STOVE PIPE MANDRELS

For Forming and Seaming Stove Pipe; Just the Thing for a Small Dealer or one who does not have a regular tin shop.

	Each
No. 36—36 in Long 4½ in. Wide, With Heavy Saddle to Attach to Bench and Pound Upon	$4.50

One in a Box; Weight 40 Lbs. Each, Boxed

BENCH PLATES

Cast Iron, Polished

With Square, Round and Oblong Socket Holes; will take all Stakes shown on preceding pages, also Swedges and Formers

To be set in flush with surface of Bench. Anchor with four ½ in Square Head Plow or Machine Bolts

	Each
No. 1—37x8 in., 16 Holes, Weight 50 Lbs	$5.00
No. 2—30x8 in., 15 Holes; Weight 30 Lbs.	3.00

Open Stock

SQUARE PAN SWEDGES

For Creasing Corners of Dripping and other Square Pans

	Each
With Sliding Gauge to Insure Uniform Work; With Bench Plate Standard; Length of Main Bar 14½ in., Wrought Iron Hammer Handle 11¾ in. Long; Hammer Face 1¾ in Wide, 6 in. Long	$4.75

Weight 10 Lbs. Each

Not carried in Stock; Will order Special

HAND ROOFING DOUBLE SEAMERS

Used in places on roof not accessible with Burritt or Other Seaming Tongs

	Per Set of 2
No. 18—One End 1¼x1 in., the Other 1½x1¼ in.; Two Pieces like the Illustration make a Set	$1.75

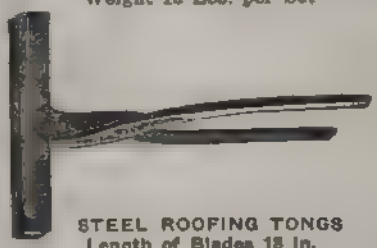
Weight 18 Lbs. per Set

NIAGARA ADJUSTABLE GUTTER BEADERS

Adjustable for Rods from ⅜ to ¾ in Diam.; When Bead is formed the Jaws can be quickly opened to remove the work

	Each
No. 30—30 in.; Weight 65 Lbs.	$10.00
No. 42—42 in.; Weight 90 Lbs.	15.00

Price includes One Straight Rod; State diameter wanted. Not carried in Stock; Shipped Direct from Factory.



STEEL ROOFING TONGS

Length of Blades 18 in.

	Per Set (2 Pairs)
No. 11—Common Gauge, 1 and 1¼ in.	$6 00
No. 13—Wide Gauge, 1¼ and 1½ in.	6 00

Weight 17 Lbs. per Set

BURRIT ROOFING DOUBLE SEAMERS

Seamers are so made as to bend the edge down further than at right angle, to facilitate the closing down operation. The Seamers do not crimp the tin, leaving the locks of uniform height.

They will double seam hips and ridges with ease, and seaming can be done much faster, easier and better than by hand and mallet.

	Per Set (2 Pairs)
No. 60—Common Gauge; to follow 1 and 1¼ in. Tongs; Finished Seam ¾ in High	$12.00
No. 70—Wide Gauge; to follow 1¼ and 1½ in. Tongs; Finished Seam 1 in. High	$15.00

Weight 42 Lbs. per Set

The Seamers are fitted for IC Tin, unless specially ordered for IX Tin, in which case they will be made to follow 1¼ and 1½ in. Tongs.

	Each
No. 17—Squeezing Tongs, Weight 17 Lbs.	$3.00

Used in Squeezing Seams on Roll Cap and Pressed Standing Seam Roofing

GUTTER TONGS

For Turning up Gutter, Square Pans, etc., for Tin and light Sheet Iron not heavier than No. 24 Gauge

	Per Pair
No. 15—14 in. Blades; Weight 8 Lbs. per Pair	$4.00

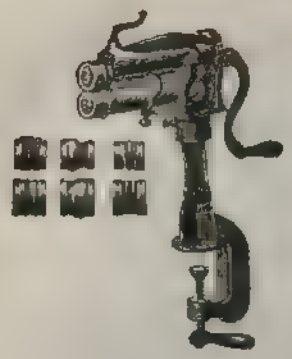
ADJUSTABLE ROOFING TONGS

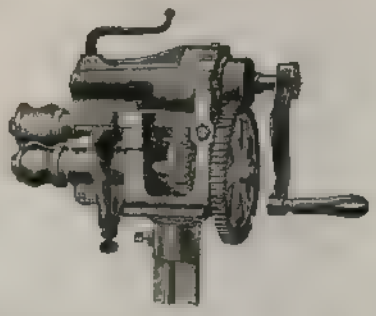
Will do the same work as six ordinary Roofing Tongs and their cost is but slightly Ligher. The adjustment is made by removing the Pins on each side of the Tongs and screwing them into the proper holes corresponding with the size of Standing Roof Seam to be produced.

	Per Pair
No. 19—18 in. Blades; will fold edges of ½, ¾, 1, 1¼, 1½ and 2 in.	$4.00

Weight 8½ Lbs. Each

TINNERS' BENCH MACHINES





NIAGARA BEADING MACHINES

For Ornamenting and Strengthening Tinware, Sheet Metal and Galvanized Work

Each

No. 4—Beads 26 Gauge material and lighter; Sizes of Beads, ¾ in. O. G., ⅝ in. Triple, ½ in. Triple Coffee Pot and ¼ in. Single; 6 in. Throat; Complete with Four Pairs of Rolls and Standard; Weight 50 Lbs....$19.76

Each

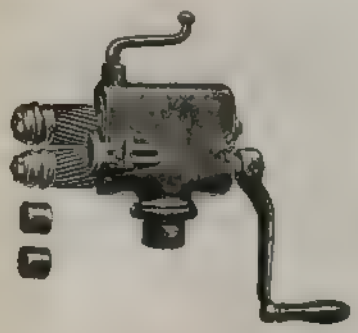
No. 02½—Beads 16 Gauge material and lighter; will bead up to 4 in. from the edge of the sheet; Complete with One Pair of 2¼ in. O. G. Rolls and Standard; Weight 135 Lbs...$30.00

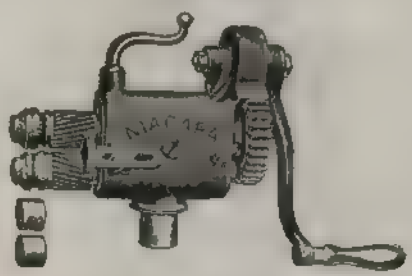
No. 02½ not carried in Stock; Shipped Direct from Factory

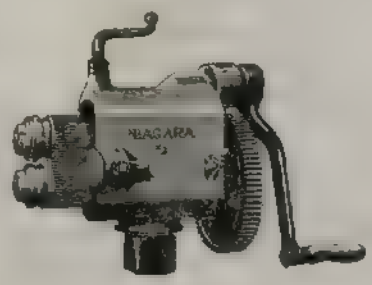
CORNICE MAKERS CRIMPERS

For crimping and contracting the end of Pipe so that lengths will fit together easily, Shafts do not extend beyond the end surface of the crimping Rolls; this allows the operator to crimp close up to a bend; Steel Connecting Gears.

No. 100—Crimps 24 Gauge material and lighter; complete with Standard; Weight 40 Lbs. Each.....$12.00







NIAGARA CRIMPING AND BEADING MACHINES

For Crimping and Beading the end of Pipe so that lengths will fit together easily; the relative depth of the crimp and bead is easily regulated, that is a deep crimp and a shallow bead can be made or vice versa or both can be made uniform; Adjustment is made by Wing Nuts near the Handle.

DIRECT ACTING

Works faster than the Geared Machine

Each

No. 200—For 24 Gauge material and lighter; Complete with Beading Rolls, one pair of Plain Collars and Standard; Weight 44 Lbs. Each..$12.00

GEARED

Easier to operate than the Direct Acting Machine

Each

No. 300—For 24 Gauge material and lighter; Complete with Beading Rolls, one pair of plain Collars and Standard; Weight 45 Lbs. Each..$12.00

HEAVY, GEARED

No. 400—For 20 Gauge material and lighter; Complete with Beading Rolls, one pair of plain Collars and Standard; Weight 120 Lbs. Each.$28.00

Not carried in Stock; Shipped Direct from Factory

IMPROVED MACHINE STANDARDS

WITH HORN

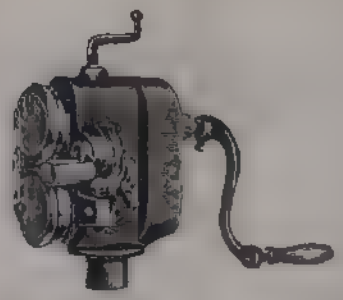
No. 11—Especially for Wiring Machines. With Horn for Hammering Stock over the Wire when beginning to run the vessel through the Machine; Will also fit any of our Wiring, Turning, Burring or Beading Machines.....$1.00

Weight 11 Lbs. Each

All Above Machines are so constructed that any part can be replaced by designating the letter stamped on the piece wanted

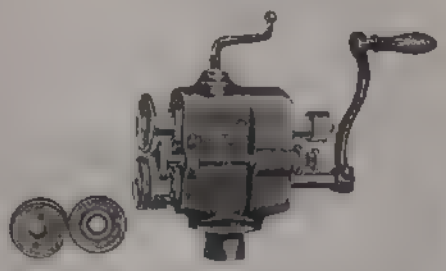
TINNERS' BENCH MACHINES

These Machines are so constructed that the Upper Face will go over Seams without causing strain or breakage



Wiring Machines follow the Turning Machines and press the edge of the material over the wire; for tin and light material not heavier than 24 Gauge

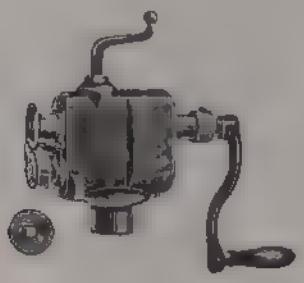
No. 41—Encased; Complete with Standard, Weight 38 Lbs Each... $14 00



SUPERIOR ENCASED TURNING MACHINES

Used for turning the edges of flat sheets to receive the wire, Tool Steel Gauge; Removable Faces, Interchangeable Parts; Complete with Standard and Extra Upper and Lower Faces.

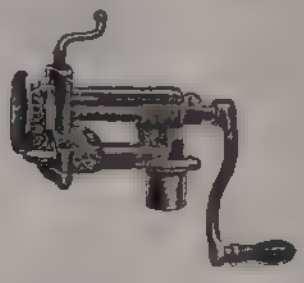
Each	Each
No. 21—Small; Weight 34 Lbs. $11.25	No. 31—Large; Weight 38 Lbs..... $11.50



SUPERIOR BURRING MACHINES

For turning up edges on flat sheets, cylindrical work, etc.

Each	Each
No. 51—Small Encased; for Tin and Other Material not heavier than 24 Gauge; Complete with Standard and Extra Upper and Lower Faces; Weight 28 Lbs. Each.....$10.00	**No. 61—Large Encased;** for Tin and Other Material not heavier than 24 Gauge; Complete with Standard and Extra Upper and Lower Faces; Weight 32 Lbs. Each.. . .....$10.50



SETTING DOWN MACHINES

These Machines follow the Burring Machines and press the edge of the bottom on to the flange of cylindrical bodies of cans and similar work; For Tin and Light Material not heavier than 24 Gauge

NIAGARA

Each

No. 71—For Seams up to $\frac{1}{2}$ in. Wide, Complete with Standard
Weight 28 Lbs. Each $9.75

SUPERIOR

Seam can be started inward, while setting it down; the work can be held up or down; this is an advantage over the Niagara.

Each

No. 81—For Seams up to $\frac{1}{2}$ in Wide, Complete with Standard $9.75
Weight 35 Lbs. Each

TINNERS' MACHINES

GROOVING MACHINES

For compressing or locking the folded seams on straight sheets or cylindrical vessels

NIAGARA

Grooves and flattens the seam without the use of a hand mallet; The Reversible Horn permits of grooving 2 in. Diam. and larger; the groove can be pressed toward the inside or outside of the work; two flat and three grooved Rolls, with Grooves 3/16, 1/4 and 1/2 in. wide, accompany each machine; Width of grooves in Round Horn 3/16, 1/4, 5/16 and 1/2 in.

For 24 Gauge material and lighter.

Nos.	Length	Weight	Each
220	20 in.	170 Lbs.	$20.00
230	30 in.	195 Lbs.	25 00
236	36 in.	215 Lbs.	30.00

Not carried in Stock; Shipped Direct from Factory

QUEEN CITY; Round Horn

Grooves and flattens the seams without the use of a mallet; The Reversible Horn permits of grooving 2 in. Diam. and larger the groove can be pressed toward the inside or outside of the work; Geared for two speeds.

No. 32—32 in. Long; For 24 Gauge materia and lighter complete with two flat and four Grooved Rolls with grooves 3/16, 1/4, 5/16 and 3/8 in. Wide; Width of grooves in Round Horn 3/16, 1/4, 5/16 and 3/8 in.; Weight 170 Lbs. Each $30.00

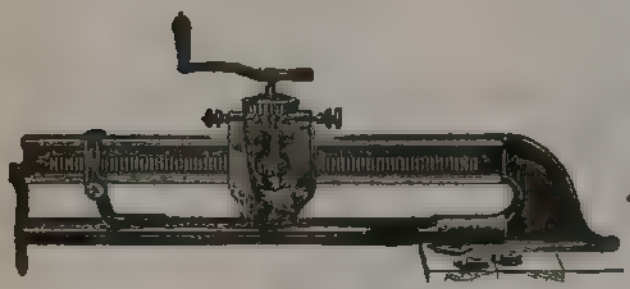
Not carried in Stock; Shipped Direct from Factory

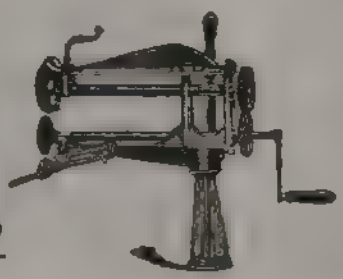
STOWE'S BRASS MOUNTED

Each

No. 20—20 in. Long; For 24 Gauge Material and lighter; Complete with three Grooved Rolls 3/16, 1/4 and 1/8 in. wide and Detachable Standard; Weight 100 Lbs. $12.50

Not carried in Stock; Shipped Direct from Factory





HEAVY GROOVING MACHINES

QUEEN CITY, GEARED

For Heavy Work; The Traveling Carriage has two Rolls, One for Grooving followed by a Flattening Roll which tightens the seam; it presses the groove toward the inside or outside of the work; can be run direct instead of geared when grooving light material; Complete with two Flat and three Grooved Rolls, with grooves 1/4, 5/16 and 3/8 in Wide; For 20 gauge material and lighter

Each

No. 336—Length 36 in.; Diam. of Horn 2¾ in.; Weight 345 Lbs. Each...$50.00

No. 348—Length 48 in.; Diam. of Horn 3½ in.; Weight 440 Lbs..... 80.00

Not carried in Stock; Shipped Direct from Factory

DOUBLE SEAMERS

For double seaming round bottoms on to Cylindrical vessels

Best adapted to ordinary wants of tinners

Each

No. 3—For Coffee Pots and small work, Diam. of Lower Face 3 in.; Depth of Throat 10 in.; Weight 70 Lbs..$16.00

No. 2—Diam. of Lower Face 4 in.; Depth of Throat 13 in.; Weight 80 Lbs 19.00

No. 1—Diam. of Lower Face 4½ in.; Depth of Throat 15 in.; Weight 100 Lbs. 21.00

Not carried in Stock; Shipped Direct from Factory

HULBERT'S

Adapted to all Kinds of Flaring and Straight Work, as Coffee and Tea Pots, Oval and Round Boilers, etc. Can be used on Metal up to 26 Gauge.

With 10 Discs and Three Faces; Five Flaring Discs 4½, 6¼, 7⅛, 8⅞, 11½ in. Diam.; Four Straight Discs 4¼, 5¾, 8⅛ and 10¼ in. Diam.; One Oval Edge Disc 5⅞ in. Diam.

Each

No. 1H—With Deflector; This Machine deflects the Ware after it is seamed, adding strength and Rigidity; For work up to 20 inches high; Weight 180 Lbs. $30 00

No. 2H—Without Deflector; For work up to 14 inches high..... 25.00

One in a Box; Weight about 125 Lbs. Each

Not carried in Stock; Shipped Direct from Factory

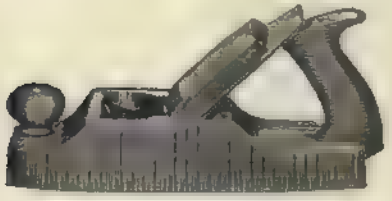
*IMPROVED WOOD PLANES

Ohio Tool Co.'s

Carefully made, faced [illegible] varnished with pure shellac varnish, and put together with [illegible] before leaving the factory. The wooden wedges, nicely fitted and finely [illegible] to the [illegible] are fully warranted, nicely blued at the upper end, whetted and tested

No. 280

No. 284



No. 282

No. 286

No. 280. Smooth Plane, without handle, 8 in. in length, 2 in. cutter, each $1.50

No. 281. Smooth Plane, without handle, 8 in. in length, 2⅜ in. cutter, each 1.60

No. 282. Smooth Plane, with handle, 10¼ in. in length, 2 in. cutter, each 1.90

No. 283. Smooth Plane, with handle, 10¼ in. in length, 2⅜ in. cutter, each 2.00

No. 284. Jack Plane, 15 in. in length, 2⅜ in. cutter, each $1.80

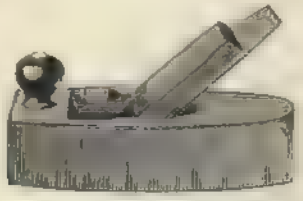
No. 286. Fore Plane, 22 in. in length, 2⅜ in. cutter, each 2.65

No. 288. Jointer Plane, 26 in. in length, 2⅜ in. cutter each 3.00

No. 290. Jointer Plane, 28 in. in length, 2⅜ in. cutter each 3.15

UNXLD WOOD PLANES

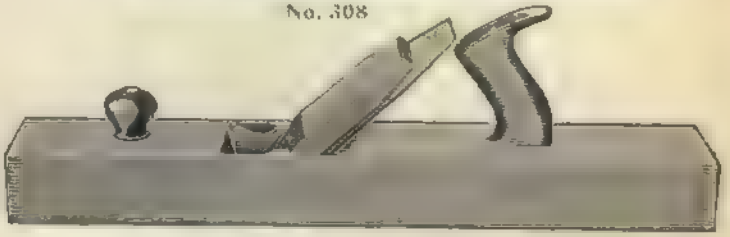
Faced, wedges nicely fitted, finely varnished, all polished bits, sharpened, ebonized knobs. In perfect working order before leaving factory.



No. 300

No. 308

No. 304



No. 311

No. 300. Smooth Plane, without handle, 8 in. in length, 2 in. cutter, each $1.50

No. 301. Smooth Plane, without handle, 8 in. in length, 2⅜ in. cutter, each 1.60

No. 302. Smooth Plane, without handle, 8 in. in length, 2¾ in. cutter, each 1.70

No. 304. Smooth Plane, with handle, 9⅝ in. in length, 2 in. cutter, each 1.90

No. 305. Smooth Plane, with handle, 9⅝ in. in length, 2⅜ in. cutter, each 2.00

No. 306. Smooth Plane, with handle, 9⅝ in. in length, 2¾ in. cutter, each 2.10

No. 308. Jack Plane, 15 in. in length, 2⅜ in. cutter, each $1.80

No. 309. Jack Plane, 15 in. in length, 2¾ in. cutter each 1.90

No. 311. Fore Plane, 20 in. in length, 2⅜ in. cutter, each 2.65

No. 312. Fore Plane, 20 in. in length, 2¾ in. cutter each 2.80

No. 314. Jointer Plane, 26 in. in length, 2⅜ in. cutter each 3.00

No. 315. Jointer Plane, 26 in. in length, 2¾ in. cutter each 3.15

No. 317. Jointer Plane, 28 in. in length, 2⅜ in. cutter each 3.15

No. 318. Jointer Plane, 28 in. in length, 2¾ in. cutter each 3.30

No. 320. Jointer Plane, 30 in. in length, 2⅜ in. cutter each 3.55

No. 321. Jointer Plane, 30 in. in length, 2¾ in. cutter each 3.70

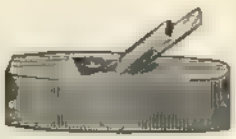
*Not carried in stock

One in a paper box

*MISCELLANEOUS WOOD PLANES

Ohio Tool Co.'s

No. 30



No. 31

No. 31a

No. 29e

Double Iron

No. 29a. Jack Rabbet, 2 in. iron, each..... $2 50
No. 29b. Jack Rabbet, Razee, 2 in. iron, each . . 2 75

Single Iron, Except Where Noted Otherwise

No. 29c. Box Makers' Plane, smooth shape 11 in. long, each . 1 00
No. 29d. Box Makers' Plane, [illegible] shape, each . 1 10
No. 29e. Box Makers' Plane, [illegible] shape, Razee, each 1 35
No. 29f. Box Makers' Plane, [illegible] shape, Razee, double iron, each . . 1 75
No. 30. Tooth Plane, each 1 00
No. 30¼. Tooth Plane, applewood, each..... . 1 40
No. 30½. Hand Rail Plane, to make round, each 1 00
No. 30¾. Hand Rail Plane, to make ogee, each. 1 00
No. 31. Mitre Plane, smooth [illegible], single iron, each. 75
No. 31¼. Mitre Plane, smooth shape, double iron [illegible] 1 00
No. 31¾. Mitre Plane, square shape, double iron, each 1 00

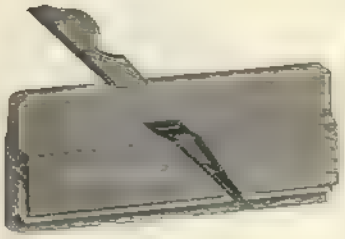
Single Iron, Except Where Noted Otherwise

No. 31a. Mitre Plane, square shape, single iron, each .$0 75
No. 31b. Mitre Plane, rosewood or cocobolo, single iron. Price on application
No. 31c. Mitre Plane, English single iron. Price on application.
No. 31½. Spar Plane, each . 1 00
No. 32. Gutter Plane, each . 1 25
No. 32½. Pump Plane, each . . 2 25
No. 33. Pump Plane, with handle, each . 2 75
No. 34. Circular, single, each . 1.00
No. 35. Circular, double, each . 1.25
No. 35¼. Large Mitre Plane, 2 irons, 3 in. wide, for picture frames, each . 10 00
No. 35½. Large Mitre Plane, 2 irons, 3 in. wide, for picture frames, each 14 00
No. 35¾. Carriage Makers' T Rabbet Plane, each..... 1.20

N. B.—Miscellaneous Planes, with irons wider than regular: Single, 10 cents; double, 15 cents, per ⅛ in. extra (list)

*MOULDING AND FANCY WOOD PLANES

Ohio Tool Co.'s

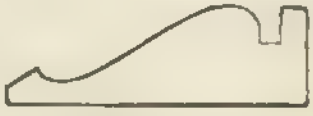


No. 37

No. 41

Moulding made by **No. 36**

Bead made by either **Nos. 37, 38 or 39**



Moulding made by **No. 40**

Bead made by **Nos. 41 or 42**

No. 36. Astragals, [illegible] each $ 55
[illegible] to [illegible], each 65
[illegible] to [illegible], each 75
No. 37. Side Beads, single boxed, [illegible] to 2 in., each 50
[illegible] to [illegible], each 55
[illegible] to [illegible], each 70
[illegible] in., each .
[illegible] in., each 1 00
No. 38. Side Beads, solid boxed, dovetailed, [illegible] to [illegible] in. each .
[illegible] to [illegible], each .
[illegible] to [illegible] in., each .
[illegible] in., each 1 00
[illegible] in., each 1 20

*Not carried in stock

No. 39. Side Beads, solid boxed, dovetailed, [illegible] to [illegible] in. each $0 70
[illegible] to [illegible], each . . 80
[illegible] to [illegible], each . .90
[illegible] to 1 in. each. 1 00

Double or Twin Beads made to order. Prices quoted upon application.

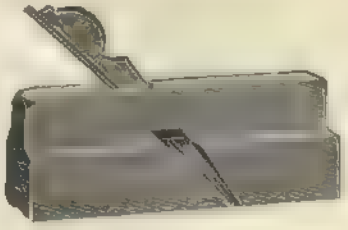
No. 40. Bead Plane, with cutter 2 [illegible] each $2 50
[illegible] to [illegible], each 3 0
No. 41. Centre Beads, solid boxed, [illegible] to [illegible] in. each .
[illegible] to ¾ in., each . .
[illegible] to 1 in., each.. . .
No. 42. Centre Beads, solid boxed, dovetailed, [illegible] to [illegible] each ..... .75
½ to ¾ in., each..... .90
No. 42½. Torus Bead, made to order. Prices quoted upon application.

*MOULDING AND FANCY WOOD PLANES

Ohio Tool Co.'s

No. 43¼

Moulding made by No. 43



No. 43½

Moulding made by No. 43½

Moulding made by No. 44

No. 43. Cove Plane, ⅛ to ¾ in., each.....$0 50
⅞ to 1 in., each..... 65
1¼ in., each 75

No. 43¼. Cushion Mouthed Plane, solid or [illegible] to 1 in., each .80
1¼ in., each .90
1½ in., each 1 00

No. 43½ is a new style Plane, with [illegible] than the old style

No. 43½. Cushion Mouthed Plane, ⅛ to ⅝ in., each. $0 50
⅞ to 1 in., each .65
1¼ in., each .75

No. 44. Cove and Bead Plane, ¼ to ½ in., each 1 25
⅝ to 1 in., each 1.50
1¼ in., each 1.75

No. 43⅛ No. 43¼ Moulding made by No. 43⅜

No. 43¼. Cushion Mouthed Plane, ⅛ to ½ in., each....$0.80
⅝ to 1 in., each .90
1¼ in., each 1 00

No. 43¼ is a new Mouding, much used for door and window casing.

No. 43⅜. P. G. Moulding Plane, ⅛ to ¼ in., each..... .80
⅜ to 1 in., each..... .90
1¼ in., each 1.00

FILLETSTERS

No. 53

No. 51. Plain, each $1 10
No. 51½. With stop, each 1 25
No. 52. With Cutter, each 1 25
No. 53. With Cutter, side stop, each..... 1 40
No. 53½. With Cutter, side stop, single boxed, each 1 55
No. 54. With Cutter, side stop, solid boxed, each 1 85

DADOS

No. 47 No. 48

No. 47. Dados, side stop, ⅛ to 1 in., each $1 10
No. 47½. Dados, side stop, solid handle, ⅛ to 1 in., each 2 50
No. 48. Dados, screw stop, ½ to 1 in., each.. 1 50

CABINET MAKERS' AND CORNICE OGEES

No. 49. Cabinet Makers' Ogee, from 2 to 4 in., each....$1 00
No. 50. Cornice Ogee, from 2 to 5 in., each 1 10

*Not carried in stock.

No. 55

No. 55. With Cutter, screw stop, boxed, each $2 50
No. 56. With Cutter, screw stop, screw arms, boxed, fence, each 3 00
No. 56½. With Cutter, screw stop, boxed with handle, each 3 75
No. 57. With Cutter, screw stop, screw arms, boxed, each 4 00
No. 58. With Cutter, screw stop, screw arms, boxed, with handle, each 4 75
No. 58½. Back Filletster, each 3 50

RAISING PLANES

No. 114. Raising Planes

Size, in.	2	2¾	3	3¼	3½	4
Each	$4.00	4 50	4.85	5 25	5 75	6 25

No. 115. Raising Planes, with Screw Arms

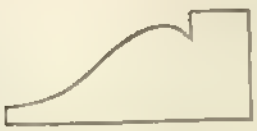
Size, in.	2	2¾	3	3¼	3½	4
Each	$4 25	4.75	5.10	5 50	6 00	6 50

MOULDING AND FANCY WOOD PLANES

Ohio Tool Co.'s

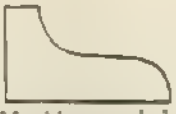
OGEES

Moulding made by
No. 59½

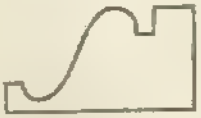


Moulding made by
No. 59

Moulding made by
No. 60

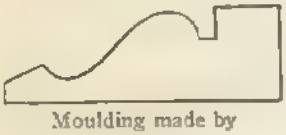


Moulding made by
No. 62, Rev. Ogee



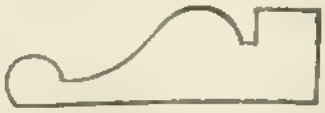
Moulding made by
No. 61

Moulding made by
No. 62½

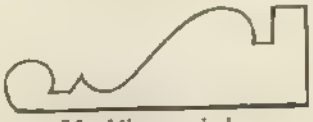


Moulding made by
No. 61¼

Moulding made by
No. 62¼



Moulding made by
No. 61½



Moulding made by
No. 62¾

No. 59. Common Ogee, ⅜ to 1 in., each $0.65
1¼ to 1½ in., each .85
1¾ to 2 in., each 1.00

No. 59½. Roman Ogee, with fence to work on edge of board, ⅜ to ⅝ in., each .75
⅝ to 1 in., each .85

No. 60. Grecian Ogee, ½ to 1 in., each .75
1¼ to 1½ in., each .90
1¾ to 2 in., each 1.10

No. 61. Grecian Ogee, with fillet, ½ to 1 in., each .90
1¼ to 1½ in., each 1.05
1¾ to 2 in., each 1.25

No. 61¼. Grecian Ogee, with bevel, ½ to 1 in., each .90
1¼ to 1½ in., each 1.05
1¾ to 2 in., each 1.25

No. 61½. Grecian Ogee, with bead, ½ to 1 in., each .90
1¼ to 1½ in., each 1.05
1¾ to 2 in., each 1.25

No. 62. Reverse Ogee, ¾ to 1 in., each $0.75
1¼ to 1½ in., each .85
1¾ to 2 in., each 1.00
2 to 2½ in., each 1.25

No. 62¼. Roman Reverse Ogee, with fence, ⅜ to ⅝ in., each .80
¾ to 1 in., each .90
1¼ in., each 1.05
1½ in., each 1.20

No. 62¼ is a new style of plane. The upper part of the nut rests the Plane. It is easier to work than the old style.

No. 62½. Roman Reverse Ogee, ⅜ to ⅝ in., each $0.75
¾ to 1 in., each .85
1¼ in., each 1.00
1½ to 1¾ in., each 1.15

No. 62¾. G. O. G., Quirk and Bead, made to order
Prices quoted on application

OVOLOS

Moulding made by
No. 63

Moulding made by
No. 66

Moulding made by
No. 64

Moulding made by
No. 65

No. 63. Grecian Ovolo, ½ to 1 in., each $0.75
1¼ to 1½ in., each .90
1¾ to 2 in., each 1.10
2¼ to 2½ in., each 1.50

No. 64. Grecian Ovolo and Fillet, ¾ to 1 in., each 1.00
1¼ to 1½ in., each 1.10
1¾ to 2 in., each 1.25

No. 65. Grecian Ovolo and Bead, ¾ to 1 in., each 1.00
1¼ to 1½ in., each 1.10
1¾ to 2 in., each 1.25

No. 66½. Grecian Ovolo, with bevel, ¾ to 1 in., each $1.00
1¼ to 1½ in., each 1.25
1¾ to 2 in., each 1.25

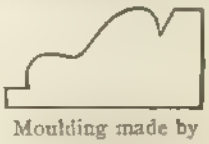
For Ogees and Ovolos made with two irons, add 50 cents each, list.

No. 66. Gothic Bead, with one iron, each $1.00
No. 66½. Gothic Bead, with two irons, boxed, each 1.25

HALVING PLANES

Furnished to order. Prices quoted on application.

DOOR AND PILASTER MOULDING



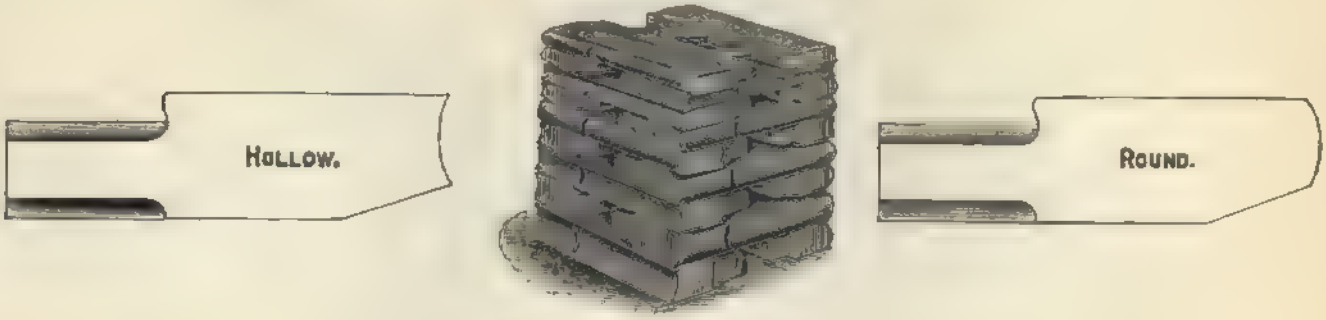
Moulding made by
No. 141

No. 141. Door Moulding Plane, ½ to 1¼ in., each $0.90
1½ to 2 in., each 1.05
No. 151. Pilaster Moulding, 3½ in., each 3.50
4 in., each 4.00

MOULDING AND FANCY WOOD PLANES

Ohio Tool Co.'s

HOLLOWS AND ROUNDS



1 Set No. 72, Nos. 1 to 9

No. 72.	Set of 9 pairs, Nos 1 to 9, per set	$9.45
	1 to 6, per pair	1.00
	7 to 9, per pair	1.15
No. 73.	Nos. 10, 11 and 12, per pair	1.35
	Nos. 13, 1¾ in.; 14, 1⅞ in., 15, 2 in., per pair	1.75
No. 72½.	Skewed Irons, set of 9 pairs, Nos. 1 to 9, per set	$11.75
	1 to 6, per pair	1.20
	7 to 9 per pair	1.55
No. 73½.	Skewed Irons, Nos. 10, 11 and 12, per pair	1.75
	Nos. 13, 14 and 15, per pair	2.00

In ordering separate Planes, please state plainly whether the Hollow or Round Plane is wanted. The Round Plane cuts the hollow, and vice versa; see illustrations above.

SIZES OF CIRCLES WORKED BY HOLLOWS AND ROUNDS

Ohio Pattern

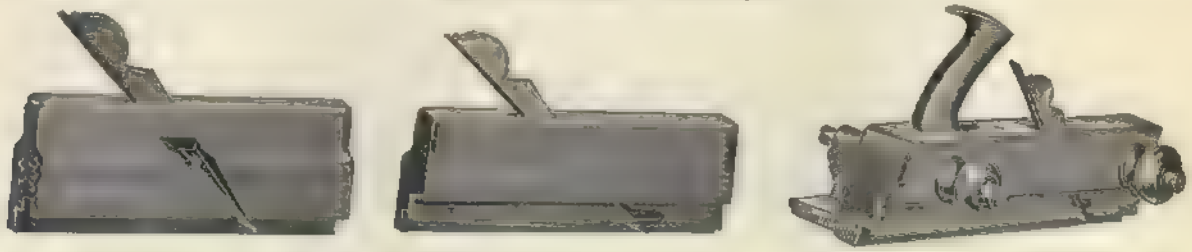
Size No.	1	2	3	4	5	6	7	8
Width of iron, in.	¼	⅜	½	⅝	¾	⅞	1	1⅛
Size circle worked, in.	½	¾	1	1¼	1½	1¾	2	2¼
Size No.	9	10	11	12	13	14	15	
Width of iron, in.	1¼	1⅜	1½	1⅝	1¾	1⅞	2	
Size circle worked, in.	2½	2¾	3	3¼	3½	3¾	4	

Auburn Pattern

Width of iron, in.	¼	⅜	½	⅝	¾	⅞
Size circle worked, in.	½	⅝	⅞	1⅛	1⅜	1¾
Width of iron, in.	1	1¼	1½	1⅝	1¾	2
Size circle worked, in.	2	2⅛	2¼	3⅛	3¾	4⅛

Give pattern and width of iron wanted in order. Smaller, intermediate and larger sizes can be furnished and prices quoted on application.

MATCH PLANES IN PAIRS



One Pair No. 75 — ***Half Pair No. 82**

No. 75.	Board, twin or separate, ⅜ to 1 in., per pair	$1.50
No. 75¼.	Board, separate, 1¼ to 1½ in., per pair	2.00
No. 75½.	Board, twin or separate, to order, ¼ in., per pair	3.50
No. 76.	Board, twin or separate, plated, ⅜ to 1 in., per pair	1.75
No. 76¼.	Board, separate, plated, 1¼ and 1½ in., per pair	2.25
No. 76½.	Board, twin or separate, plated, to order, ¼ in., per pair	4.25
No. 77.	Board, with solid handles, ½ to 1 in., per pair.	2.25
No. 77½.	Board, with solid handles, 1¼ and 1½ in., per pair	2.75
No. 78.	Board, with solid handles, plated, ½ to 1 in., per pair	2.50
No. 78½.	Board, with solid handles, plated, 1¼ and 1½ in., per pair	3.00
No. 79.	Plank, 1¼ to 1½ in., per pair	2.25
No. 80.	Plank, plated, 1¼ to 1½ in., per pair	2.50
No. 81.	Plank, boxed, 1¼ to 1½ in., per pair	2.50
No. 82.	Plank, with screw arms, per pair	3.75
No. 83.	Plank, with screw arms and boxed, per pair	4.25
No. 84.	Plank, with screw arms and plated, per pair	4.00
No. 84½.	Plank, with screw arms, plated and boxed, per pair	4.50
No. 85.	Plank, with screw arms and full plated, per pair	4.75

In ordering separate planes, please state whether the grooving or tonguing part is wanted. The tonguing plane cuts the tongue and the grooving plane plows the groove.

MATCH PLANE ARMS

***No. 86.** Applewood, complete . . . . . per pair, $1.00

*Not carried in stock

MOULDING AND FANCY WOOD PLANES

Ohio Tool Co.'s

NOSING MOULDING PLANES

Moulding made by No. 89

No. 89. Nosing Moulding, ½ to ⅝ in., each.....$0.80
¼ to ⅜ in., each..... .90
1 to 1¼ in., each..... 1.00

NOSING STEP PLANES

No. 90

No. 91

No. 92

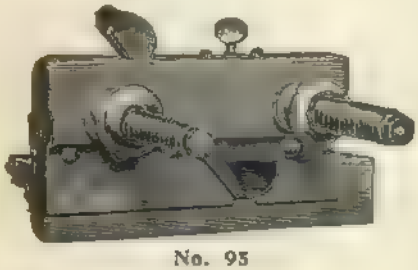
No. 90. Nosing Step, one iron, ¾ to 1¼ in., each $ 80
1⅜ to 1½ in., each 1 00
1¾ to 2 in., each 1 25

No. 90½. Nosing Step, one iron, with handle, ¾ to 1¼ in., each 1 10
1⅜ to 1½ in., each 1 30
1¾ to 2 in., each 1 50

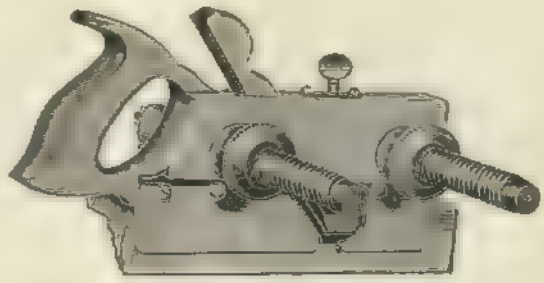
No. 91. Nosing Step, two irons, ¾ to 1¼ in., each $1 10
1⅜ to 1½ in., each 1 25
1¾ to 2 in., each 1 50

No. 92. Nosing Step, two irons, with handle, ¾ to 1¼ in., each 1 50
1⅜ to 1½ in., each 1 75
1¾ to 2 in., each. 2 00

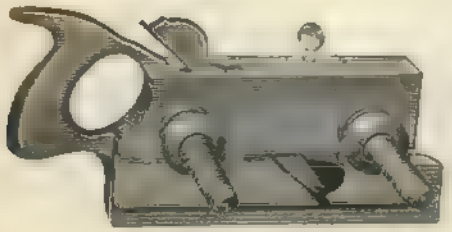
*PANEL PLOWS



No. 95



No. 101. Improved Handle for Right Hand



No. 101. Round Handle

PLOW ARMS

No. 110. Boxwood Plow Arms, complete, per pair....$1.75
No. 111. Rosewood Plow Arms, complete, per pair.... 1.50
No. 112. Applewood Plow Arms, complete, per pair... 1.00

Do not include handles, except where so described. Handled Plows made with improved or round handles. State which is wanted, if any choice.

No. 94. Beech, 4 irons, wood stop, each .....$ 4.00
No. 94½. Beech, 8 irons, wood stop, each 5 00
No. 95. Beech, 8 irons, screw stop, each 5 50
No. 96. Beech, screw stop, boxed fence, each..... 5 85
No. 96½. Beech, screw stop, with handle, each..... 6.50
No. 97. Beech, screw stop, with handle, boxed fence, each 6.85
No. 98. Beech, boxwood arms, each 6 25
No. 99. Beech, boxwood arms, boxed fence, each 6 60
No. 100. Beech, boxwood arms, with handle, each.. 7.75
No. 101. Beech, boxwood arms, with handle, boxed fence, each 8.00
No. 102. Box or rosewood, each 8 00
No. 103. Box or rosewood, ivory tipped, each 9 00
No. 104. Box or rosewood, with handle, each 10.00

*Not carried in stock.

No. 105. Box or rosewood, with handle, ivory tipped, each $11 00
No. 106. Applewood, boxwood arms, screw stop, each 7.50
No. 107. Applewood, boxwood arms, screw stop, boxed fence, each. 8 00
No. 107a. Applewood, screw stop, boxed fence, handled, each 7 75
No. 107b. Applewood, boxwood arms, screw stop, handled, each 9.00
No. 107c. Applewood, boxwood arms, screw stop, boxed fence, handled, each 9 25
No. 107d. Ebony, without handle, each 10 00
No. 107e. Ebony, ivory tipped, without handle, each. 11 00
No. 108. Ebony, with handle, each 12.00
No. 109. Ebony, with handle, ivory tipped, each.... 13.00

*MOULDING AND FANCY WOOD PLANES

REEDING PLANE — Ohio Tool Co.'s

Beads made by **No. 122**, Four Beads

No. 122.	Reeding Plane, to make 1 bead, ¼ to [illegible] each	$1 00
	2 beads, ¼ to ½ in., each	1 40
	3 beads, ¼ to ½ in. each	1 80
	4 beads, ¼ to ½ in. each	2 30
	5 beads, ¼ to ½ in., each	3 00
No. 123.	Side Rabbets, per pair	2 25
No. 124.	Snipe Bills, single boxed, per pair	2 25
No. 124½.	Snipe Bills, double boxed, per pair	2 75

COPING PLANES

No. 45.	Coping, [illegible] boxed, each	$ 75
No. 45¼.	Coping, single, each	[illegible]
No. 45½.	Coping, double and boxed, each	[illegible]
No. 45¾.	Coping, double, for doors, each	[illegible]

RABBET PLANES

No. 116

No. 119

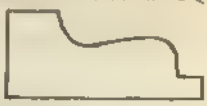
No. 116.	Skew, ¼ and ⅜ in., each	$1 00
	½ to 1 in., each	90
	1¼ in., each	75
	1½ in., each	[illegible]
	1¾ in., each	[illegible]
	2 in., each	90
	2¼ in., each	1 00

For Rabbet Plane No. 116, with one cutter, add 15 cents and for two cutters, add 30 cents, each, list.

No. 117.	Skew, cutter and boxed, ½ to 1 in., each	$1 05
	1¼ in., each	1 10
	1½ in., each	1 15
	1¾ in., each	1 25
	2 in., each	1 35
No. 118.	Skew, with center handle and one cutter, 1½ to 2 in., each	1 50
	2¼ to 2½ in., each	1 80
No. 119.	Skew, with handle and two cutters, 1½ to 2 in., each	1 70
	2¼ to 2½ in., each	2 00
No. 119½.	With handle on side, add to prices for 119 for same size, extra, list	.20
No. 119¾.	Skew, center handle, Razee, two cutters, 1¼ to 2 in., each	2 00
No. 120.	Square, same prices for same sizes as No. 116.	
No. 121.	Square, boxed face, ½ to 1 in., each	1 05
	1¼ in., each	1 10
	1½ in., each	1 15

*Not carried in stock, except No. 116.

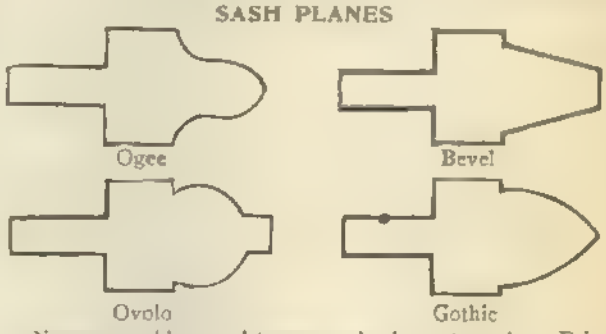
REVERSE OGEE AND SQUARE



Moulding made by **No. 140**

No. 140.	Reverse ogee and square, ¼ to 1 in., each	$0 75
	1¼ to 1½ in., each	85
	1¾ to 2 in., each	1.00

SASH PLANES



Moulding and fancy sash planes to order. Prices on application.

No. 125.	With one iron, bevel or ovolo, each	$0 60
No. 126.	With two irons, bevel or ovolo, each	1.00
No. 127.	With two irons, boxed, bevel or ovolo, each	1.25
No. 128.	Screw arms, Self-regulating, bevel or ovolo, each	1 75
No. 129.	Screw arms, self-regulating, gothic or ogee, each	1.75
No. 130.	Screw arms, self-regulating, boxed, bevel or ovolo, each	2 00
No. 131.	Screw arms, self-regulating, boxed, gothic or ogee, each	2.00
No. 132.	Screw arms, self-regulating, dovetailed, boxed, bevel or ovolo, each	2.25
No. 133.	Screw arms, self-regulating, dovetailed, boxed, Gothic or ogee, each	2.25
No. 133¼.	Brass screws, self-regulating, boxed, bevel or ovolo, each	2 75
No. 133½.	Brass screws, self-regulating, boxed, Gothic or ogee, each	2 75
No. 134.	Brass screws, self-regulating, dovetailed, boxed, bevel or ovolo, each	3 00
No. 135.	Brass screws, self-regulating, dovetailed, boxed, Gothic or ogee, each	3 00
No. 135½.	Meeting rail plane, for sash, each	3 75

TABLE AND DOOR PLANES

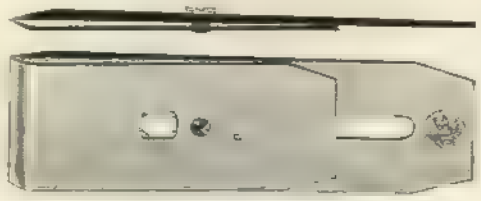
Work done by Table Planes

Work done by No. 139¼

No. 136.	Table Planes, with gauge, ⅛ to ⅝ in., per pair	$1.35
	¾ in., per pair	1.50
No. 137.	Table Planes, with gauge, dovetailed, boxed, ⅛ to ⅝ in., per pair	1.75
	¾ in., per pair	1.90
No. 138.	Table Planes, with fence, ⅛ to ⅝ in., per pair	1.65
	¾ in., per pair	1.85
No. 138a.	Table Planes, with fence boxed, ⅛ to ⅝ in., per pair	2.25
No. 138¼.	Table Planes, twin, with fence, per pair	2.10
No. 139.	Washboard Planes, each	1.20
No. 139¼.	Door Plane, with screw arms and fence each	1.75
No. 139½.	Door Plane, with screw arms, bevel, each	1.50
No. 139¾.	Door Plane, with screw arms, ogee, each	1 60
No. 139a.	Door Plane, ogee, single, each	.88

"OHIO" PLANE IRONS

Made from extra quality crucible steel, tempered by the most improved process. Every iron warranted. In ordering plane irons state number of plane for which they are wanted.



No. 0254

PLANE IRONS FOR ADJUSTABLE IRON AND WOOD BOTTOM PLANES

No. 0253. Single Cut Irons for Ohio Adjustable Planes

Size, inches	1¼	1⅝	1¾	2	2⅛	2¼	2⅜	2⅝
List, each	$0.22	.24	.25	.27	.29	.31	.33	.38

No. 0254. Double Irons for Ohio Adjustable Planes

Size, inches	1¼	1⅝	1¾	2	2⅛	2¼	2⅜	2⅝
List, each	$0.37	.39	.41	.43	.45	.47	.50	.59

One-half dozen in a box

BLOCK PLANE IRONS

For Plane No.	.09½ & 09⅝	09¾	015 & 015⅝	015½	
List, per dozen	$1.75	1.75	1.75	1.75	
For Plane No.	.016	017	018	019	
List, per dozen	$1.75	1.75	1.75	1.75	
For Plane No.	060 & 060½	065 & 065½	0130	0220	
List, per dozen	$1.75	1.75	1.30	1.75	
For Plane No.	0102	0103	0110	0120	
List, per dozen	$1.90	.90	1.30	1.75	
For Plane No.	.0100	0101	0140	075	
List, per dozen	$0.55	.55	2.10	2.10	

IRONS FOR MISCELLANEOUS IRON PLANES

For Plane No.	0112	012	040	0180	0181	0182
List, per dozen	$2.10	2.10	2.10	2.10	2.10	2.10
For Plane No.	0190	0191	0192	078		
List, per dozen.	$2.10	2.10	2.10	2.10		
For Plane No.	071 & 071½	074 (Cut Iron)				
List, per dozen.	$3.15	4.55				

PLANE IRONS FOR ALL WOOD PLANES

No. 253 Single Iron

No. 254 Double Iron

No. 253 Cut Iron

No. 254. Double Plane Irons

Size, inches	1⅝	1⅝	1¾	1⅞	2
Price, per dozen	$5.50	6.00	6.00	6.25	6.45
Size, inches	2⅛	2¼	2⅜	2½	2⅝
Price, per dozen	$6.65	7.00	7.40	8.20	9.00
Size, inches	2¾	3	Assorted 2 to 2½		
Price, per dozen	$10.15	11.70	7.15		

No. 253. Single or Cut Plane Irons, without Caps

Size, inches	1⅝	1⅝	1¾	1⅞
Price, per dozen	$2.50	2.75	2.75	2.95
Size, inches	2	2⅛	2¼	2⅜
Price, per dozen	$3.15	3.35	3.70	4.10
Size, inches	2½	2⅝	2¾	3
Price, per dozen	$4.50	4.90	5.50	7.00

Assorted, 2 to 2½, per dozen $3.75

Note. In ordering No. 253 irons always specify whether cut irons or single irons are wanted. See illustrations.

No. 254½. Eureka, Double, Brass Nutted, Sharpened Ready to use. Add $.....per dozen to price of No. 254.

MISCELLANEOUS PLANE IRONS

OHIO TOOL CO.'S

No. 254½. Soft Plane Irons, without caps

Size, inches	2	2⅛	2¼	2⅜	2½	2⅝
Price, per dozen	$2.00	2.13	2.38	2.63	2.88	3.13
Size, inches	2¾	3	3¼	3½	3¾	4
Price, per dozen	$3.50	4.50	4.75	5.50	6.00	6.50

No. 255. Raising Plane Irons

Size, inches	2½	2¾	3	3¼	3½	3¾	4
Price, per dozen	$3.25	3.75	4.50	5.00	5.50	6.00	6.50

No. 256. Leveling Plane Irons

Size, inches	2	2⅛
Price, per dozen	$2.25	2.50

No. 257. Coopers' Jointer Irons, single, 10 in. long

Size, inches	2⅛	2¾	3
Price, per dozen	$5.50	6.00	6.25

Prices for larger sizes quoted on application

No. 258. Coopers' Jointer Irons, double, 10 in. long

Size, inches	2½	2¾	3
Price, per dozen	$10.00	10.75	11.88

Prices for larger sizes quoted on application

COOPERS' FLOAT AND GOUGE HOWEL IRONS

Made to order. Prices quoted on application

No. 259. Stock Howel Irons

Size, inches	1¾	1⅞	2	2¼
Price, per dozen	$3.50	3.63	3.75	4.50

No. 260. Match Plane Irons for Ceiling Planes

Size, inches	½	⅝	¾	⅞	1
Price, per dozen	$2.62	2.62	2.75	2.80	2.92

No. 260½. Match Plane Irons for Flooring Planes, 1¾ in., per dozen $3.25

No. 261. Match Plane Bits for Board and Plank Match Planes, ⅛ to ⅞ in., per dozen 1.50

No. 262. Tooth Plane Irons

Size, inches	1⅞	2	2⅛	2¼
Price, per dozen	$4.95	5.15	5.35	5.70

No. 263. Skew Rabbet Irons

Size, inches	½	⅝	¾	⅞	1	1¼
Price, per dozen	$1.15	1.20	1.25	1.30	1.40	1.55
Size, inches		1⅝	1¾	2	2¼	2½
Price, per dozen		$1.65	1.85	2.00	2.25	2.60

No. 264. Square Rabbet Irons
Same price as No. 263 for same sizes

No. 265. Soft Molding Irons

Size, inches	¼	⅜	½	⅝	¾	⅞	1
Price, per dozen	$0.90	0.90	0.90	0.95	0.95	0.95	1.00
Size, inches		1⅛	1¼	1⅜	1½	1⅝	1¾
Price, per dozen		$1.10	1.15	1.20	1.25	1.35	1.45
Size, inches		1⅞	2	2⅛	2¼	2⅜	2½
Price, per dozen		$1.60	1.70	1.85	1.95	2.10	2.25

No. 266. Plow Bits, per set of 8, one each, ⅛, ¼, ⅜, ½, ⅝, ¾, ⅞, per set $1.50

No. 266½. Filletster Irons, 1⅝ in., per dozen 1.50

No. 267. Dado Irons

Size, inches	⅛	¼	⅛	⅜	½
Price, per dozen	$1.00	1.00	1.00	1.00	1.00
Size, inches			⅝	¾	⅞	1
Price, per dozen			$1.06	1.10	1.15	1.25

CUTTERS

No. 267½. Dado Cutters

Size, inches	⅛	¼	⅛	⅜	½
Price, per dozen	$1.25	1.25	1.25	1.25	1.25
Size, inches	⅝	¾	⅞	1	
Price, per dozen	$1.30	1.35	1.40	1.50	

No. 268. Slitting Gauge Cutters, per dozen .. $1.20
No. 268½. Filletster Cutters, per dozen 1.00
No. 269. Rabbet Plane Cutters, per dozen 1.00

PLANE STOPS

No. 269½. Plow Screw Stops, per dozen $5.00
No. 270. Dado Screw Stops, per dozen .. 4.00
No. 270½. Filletster Screw Stops, per dozen .. 7.00

No. 271. Plow Side Stops, per dozen .. $1.80
No. 271½. Dado Side Stops, per dozen ... 1.80
No. 272. Filletster Side Stops, per dozen. 3.00

SPOKE SHAVE CUTTERS

For No.	051	052	053	054	055	056	056½	057	058	059	060 (in pairs)	062	064	065
Per dozen	$0.75	.75	.75	.75	.75	1.15	1.50	.75	.75	.75	1.15	.75	.55	.55

CABINET SCRAPERS

FLAT STEEL

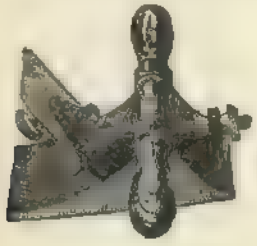
Size, inches	2½x6	3x6	3½x6	4x6	5x6
Per dozen	$0.60	.70	.80	.90	1.10

IMPROVED WOOD SCRAPER

This scraper can be adjusted [illegible] and [illegible]tch, and may be worked toward or from the person using it. The roller [illegible]s a support to rel[illegible]e [illegible]n on the wr[illegible]s and hands of [illegible]e workman. [illegible] can be detached for working into corners.

No. 83. Wood scraper, with handles and roller, 3 in blade, per dozen $12.00
Cutters for above scrapers .40

STANLEY ADJUSTABLE VENEER SCRAPER



No. 12. Adjustable [illegible] scraper, 3 in cutter [illegible] $2.40
Extra cutters, for [illegible] scraping, each..... .20
Cutters, for toothing, Nos. 22, 28, 32 (22, 28 or 32 teeth per inch), each. .[illegible]

STANLEY'S SINGLE HANDED SCRAPER

No. 82. 14½ in. long, 3 in. blade, maple handle, each....$1.05

*OHIO CABINET SCRAPER

[illegible]e thumbscrew shown in cut permits the blade to be [illegible]sprung to a slight [illegible]ve

No. 080. Raised handles, 11 in. in length, 2¾ in. blade, per dozen $12.00

*Not carried in stock

STANLEY CABINET SCRAPER

The blade of this scraper may be sprung to a slight [illegible]ve by the thumbs[illegible]w shown at the center of the cut, which will be found a great [illegible] [illegible] working [illegible]

No. 80. [illegible] [illegible] [illegible] per doz[illegible] $12.00
[illegible] [illegible], per d[illegible] .40

STANLEY ADJUSTABLE SCRAPER

No. 112. Adj[illegible] [illegible] plane, [illegible] in length, 3 in [illegible] $2.10
This tool [illegible] the same cutters as scraper plane No. 12

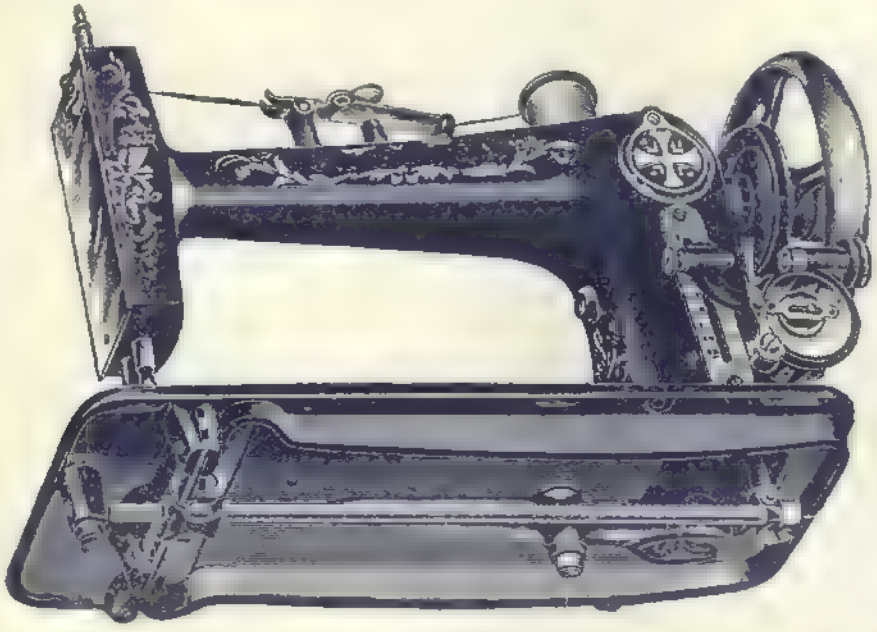
DIKEMAN

No. 125. Dikeman all-steel scraper, reversible head, ball joint, per dozen.....$18.00
Blades are 3x5 in., No. 16 gauge.

Peerless Top Tension Construction

Only the Best Materials and Most Skilled Workmanship Enter into These Machines

Almost any machine may present an attractive outward appearance, but the real test is in the service given by constant everyday use. The machine with defective material or interior workmanship soon tries the patience of the operator; while the machine made of reliable and tested material by the skilled hands of mechanics who are experts in this particular line, is a constant source of joy and satisfaction to the operator. : : : : : :



The Head

is the all important part of any sewing machine, and the large illustration herein shown gives a good idea of the simplicity of construction of our **Improved New Peerless Sewing Machine** head. There are very few working parts, thus reducing the chances of machine getting out of order. **The Bearings** are of best crucible steel, highly tempered and polished, accurately adjusted, and provided with take-up devices so that they may be tightened in years to come to take up all lost motion caused by wear. **Ball Bearings** are provided in the more important bearings, as shown in the illustration, making it the easiest running head on the market today. The main shaft is polished, case hardened steel, with a double eccentric cam which operates both feed and shuttle mechanism.

Important Features

In Improved New Peerless Machines shown on the following pages are the positive double tension, insuring a firm, well-made stitch of uniform size; the stitch regulator, which enables the operator to regulate the number of stitches to the inch, with the utmost exactness, for coarse or fine goods; the automatic bobbin winder, and the self-threading cylinder shuttle.

The Finish

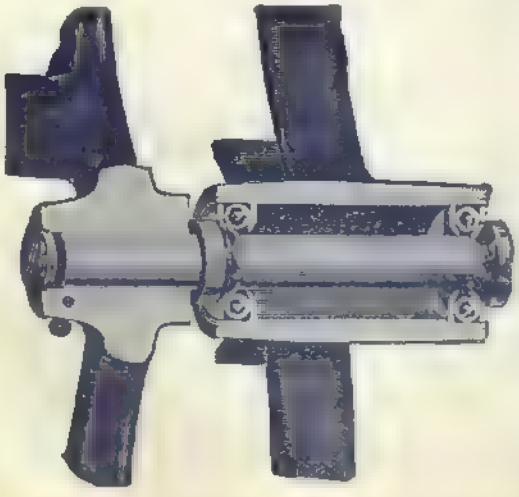
The head is made of the best material, heavily enameled with seven coats of the best French enamel baked on. It is hand polished, and presents a smooth, handsome surface. The polished steel face plate is heavily nickel plated, as is also the tension plate, automatic bobbin winder, medallion and hand wheel. The needle bar is of bright polished steel. Taken altogether, it is one of the handsomest and best sewing machine heads in use.

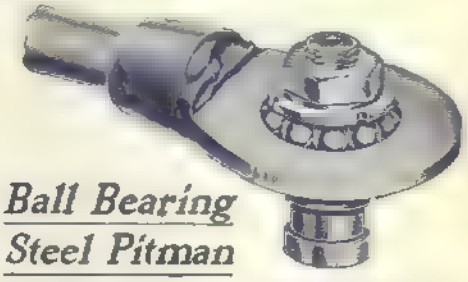
Self-Threading Shuttle

is another advantage and convenience of our Improved New Peerless Machines. The shuttle is a perfect cylinder steel shuttle, open at one end to admit the bobbin, easy to put in and easily removed. There are no catches or latches to open or close, no spring to bother with, no holes for threading to try your patience. It threads itself and has an even, perfect tension.

Automatic Bobbin Winder

Each of our Improved New Peerless Machines is provided with our automatic bobbin winder, a device that saves much time, and insures the bobbin being smoothly and evenly wound. It is so simple a child can use it and contains so few parts that it is almost impossible to get out of order. It is easily swung round so that it does not run when not winding a bobbin, thus preventing unnecessary wear. The patent automatic guide attachment prevents the thread from running over the ends of the bobbin, and winds the thread evenly.





Ball Bearing Steel Pitman

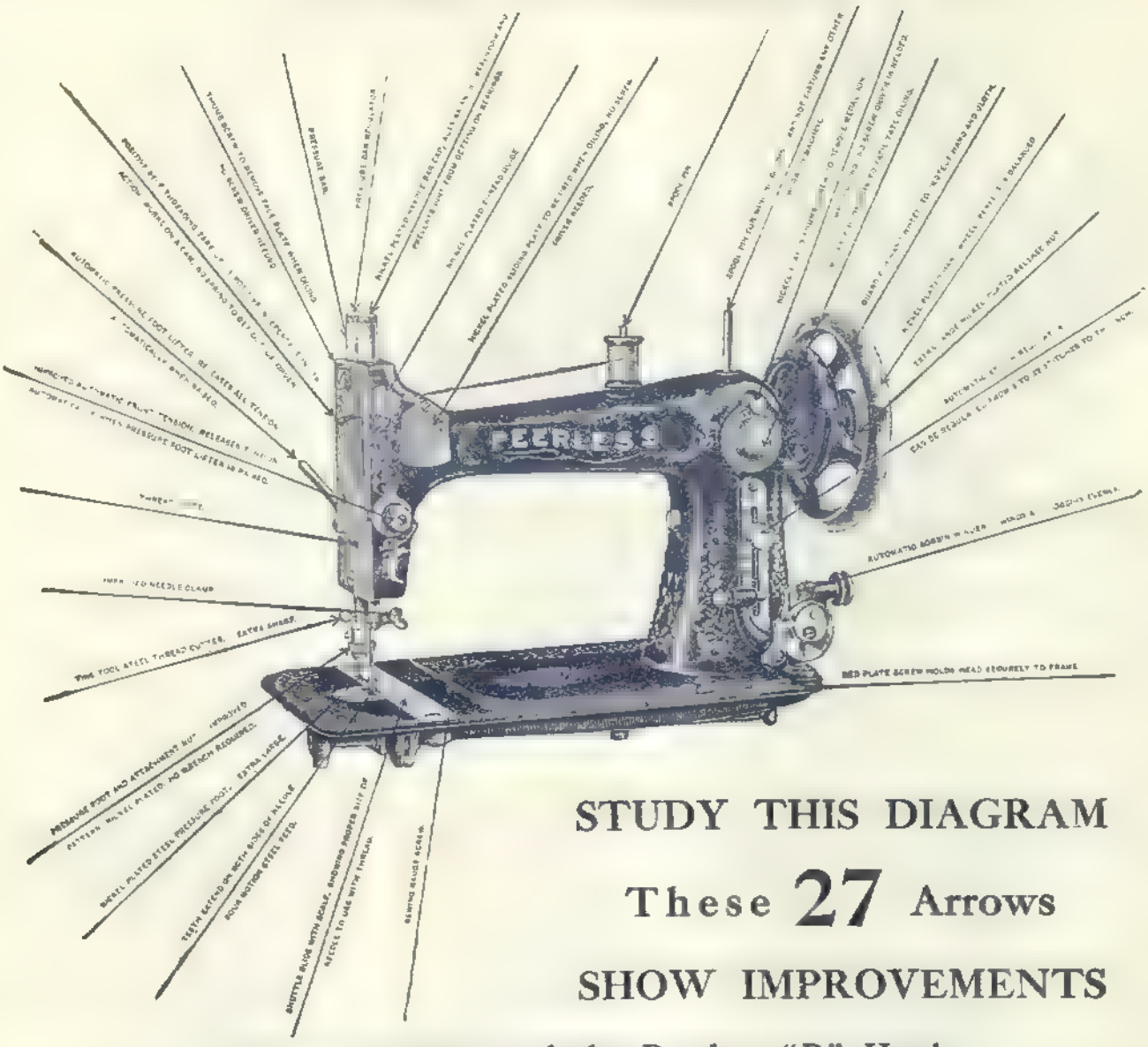
Another strong feature of the Improved New Peerless is the steel pitman with full ball bearing heads at both top and bottom. The larger illustration here shows a sectional view of the pitman head with part of head cut away to show position and arrangement of the ball-bearing. The illustration to the right shows both ends of pitman, both of which are full ball bearing. With case hardened ball bearing in pitman, balance wheel and head, the Improved New Peerless is the quietest, easiest running, easiest operated, and best sewing machine made, regardless of price. It is as nearly perfect as it is possible to make a machine and every part is carefully tested by experts at the factory before and after assembling so that you are sure to get a perfect working machine.

Balance Wheel Bearings

Particular attention has been given to the bearings in our balance wheel. Unlike most machines the balance wheel itself does not revolve around a shaft, but a specially constructed shaft is securely fastened in the balance wheel and the shaft revolves on ball bearings accurately fitted in the stand, as shown in the illustration on the left. Adjustable steel cones are provided for taking up any play or looseness. The extra long bearing points prevent wobbling of the balance wheel and make it the easiest running machine ever built.

This is the Standard Peerless "B" Head

THAT HAS WON PRE-EMINENCE



Winning Features of the Peerless "B" Head

HIGH-ARM—Largest obtainable in any family sewing machine. Permits easy handling of bulkiest material.

CAPPED NEEDLE-BAR AND PRESSER-FOOT-BAR This protection insures cleanliness. Both bars are the most accurate in stroke of any made.

FOUR-MOTION FEED—Extends to both sides of needle. Absolutely positive and regulated by length of stitch by plain figure gauge at right.

SIDE DISC TENSION—Delicate, adaptable, simple.

AUTOMATIC TENSION RELEASE Lifting the presser foot releases all tension from thread, so that thread cannot break or strain needle as work is removed.

POSITIVE TAKE-UP Operated by a cam, not by a spring. Self-threading, controls perfectly any size or kind of thread.

AUTOMATIC BOBBIN-WINDER—Winds bobbin as evenly as a spool of thread, and without attention. Presser-foot and needle-bar stand quiet while bobbin is winding. No need to remove work from machine when winding bobbins. Extra spool pin for bobbin winding.

SELF-THREADING SHUTTLE—Cylindrical, spring tension, needing little adjustment. No latch to open; no hole to thread through. Steel of highest temper; takes extra large bobbin; will last a lifetime.

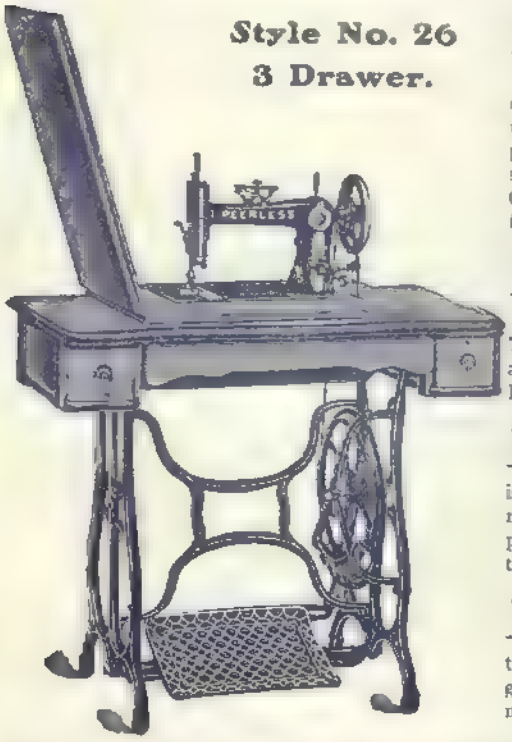
With Style 29 Peerless "B" we furnish Free this Patent Spool Tray

The accompanying cut illustrates our **new spool tray.** Every woman using a sewing machine will readily appreciate this convenience. It is made of hard wood, covered with blue velveteen. The spool pins are nickel plated and will hold twelve spools of thread. It has a box for buttons and bobbins, a thimble holder, needle and pin cushion, and ebony handle to remove it from the machine if necessary. It is universally conceded to be one of **the most practical improvements** ever put on a sewing machine. This tray can only be found with the Peerless "B" Style 29 Machine. It is made to fit the drawers of this style only.

PEERLESS SEWING MACHINES

Our Lowest Priced Machine.

We offer this 3-drawer Peerless drop head machine. This machine cannot compare with our full ball bearing Improved New Peerless Machine in material, finish, or quality of work. However, the trade demands same, and you may have our assurance satisfaction is guaranteed



Style No. 26
3 Drawer.

The Stand

The cast iron stand is one of neat design and strong. It has pivot bearings instead of the ball bearings found in our higher grade machines, yet such care is exercised in the manufacture of even this, our cheapest machine, that it will be found a very easy running perfect working machine. We do not claim this machine is as high grade or will give the same degree of satisfaction as our full ball bearing, strictly high grade machines shown on the following pages, yet for the average work it will give satisfactory service and will be found equal to any other machine on the market at a similar price.

The Woodwork

The cabinet or woodwork, is plain solid oak, nicely varnished and substantially built There is nothing elaborate about it, but it is honestly built and well finished. The drawers are perfectly fitted and afford storage place for thread, needles, attachments and accessories. It is finished golden oak color

The Head

is of good size with long arm of correct shape and well enameled. The shuttle and feed mechanism is simple and gives good service with little attention. All bearings are of polished steel, accurately fitted and adjustable to take up lost motion. It has a positive tension that insures a proper and well made stitch.

The Accessories

that we furnish free with this machine consist of one oil can, six bobbins, one gauge, one gauge screw, one instruction book, one screw driver and one dozen needles, and all necessary attachments.

No. Style 26, Three-Drawer - - List Price, $32.00

THIS FIVE-DRAWER DROP HEAD PEERLESS MACHINE

is a somewhat higher grade machine than the first one described above, yet in appearance, construction and operation it does not compare with our higher grade machines described on succeeding pages. However, it is an exceptionally good machine for the money, noted for its durability and general satisfaction.

Construction

The cast iron stand is of good weight and well braced, affording a rigid base for the [illegible]nd head. The bearings are of the pivot type of polished steel. While not as [illegible] as our full ball bearing machines, it will give very satisfactory service and compare [illegible]ly with other machines selling at such a low price.

The Head

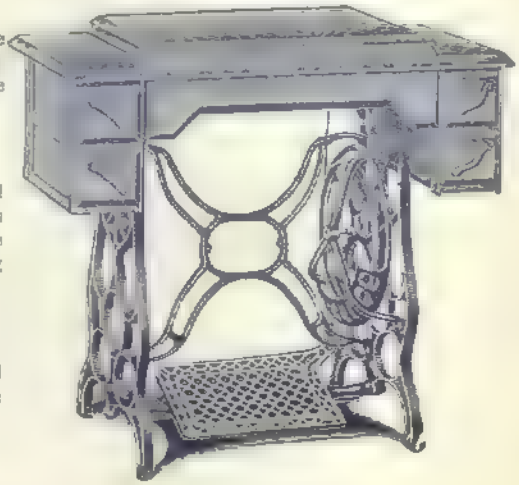
This machine is equipped with a high arm top tension head, well constructed and will give [illegible] service. It is nicely enameled with bright parts nickel plated. All working parts in the head are polished steel and accurately fitted. It has a positive tension and accurate feed. It will give very good satisfaction on ordinary work, but it is not capable of producing the high class work that our highest grade machine will do.

The Case

or woodwork is plain oak, nicely varnished. No ornamentation, but a good, plain, well made case with all joints neatly fitted. Has five drawers, two on either side of case and one center drawer for bobbins, needles, etc.

With Each Machine

we furnish free one oil can, six bobbins, one dozen needles, one gauge screw, one gauge, one instruction book, and one screw driver, and all necessary attachments.



Weight, crated, 110 lbs.

New Style 60, Five-Drawer - - List Price, $33.75

NEW PEERLESS MACHINE

An Excellent Sewing Machine Complete with Full Set of Attachments at a Very Moderate Price

Style No. 27 5-Drawer

Quality will be remembered long after the price is forgotten.

The drop head sewing machine we illustrate here is an excellent machine for so low a price, and will be found equal in all respects to machines sold through agents at 40 per cent to 50 per cent more than we ask. We do not claim this machine is equal to machines that sell at $40.00 to $50.00, but it will be found very satisfactory. It is not so easy running as our full ball bearing machines, but for the sewing required for a small family it will answer very well.

This Machine

has a ribbon style iron stand of neat design. It is light but strong, as it is well braced and affords a secure foundation for case and head. The stand is nicely enameled and is fitted with castors. The treadle is full size and easy working. The balance wheel is pivot bearing of special design, so accurately fitted and adjusted as to make it very easy running. Balance wheel has a large dress guard to protect operator's clothes from coming in contact with the wheel.

Solid Oak Case

The case of this machine is solid oak with panel effect ends and rounded corners. While the case is plain it is very neat and nicely finished. It has five drawers, two of large size on either side and one long center drawer, the latter being designed as a place for keeping bobbins, needles, and such small parts.

The Head

is a full high arm head nicely enameled and perfect working. The mechanism is simple and not liable to get out of order or give any trouble. All working parts are of best steel accurately fitted and nicely finished. It has our positive double tension, foot motion feed, and self-threading cylinder shuttle. Each machine is equipped with an automatic bobbin winder and a stitch regulator with accurate scale for regulating the size of stitch for different kinds of material. Each machine is tested by experts at the factory before shipment is made, so you are sure to get a perfect working and satisfactory machine.

Easy to Operate

It is an easy matter to learn to operate our New Peerless Machines. They contain fewer parts than any other machine and consequently are less liable to get out of order. With each machine we furnish a complete instruction book, printed in five languages, which will enable anyone, without previous experience, successfully to operate our machines.

Our Facilities

for furnishing high grade, fully guaranteed sewing machines at money saving prices are unequaled and unexcelled. We ask a careful comparison of our machines with those purchased of other concerns, which will do more towards establishing the values we give than any argument.

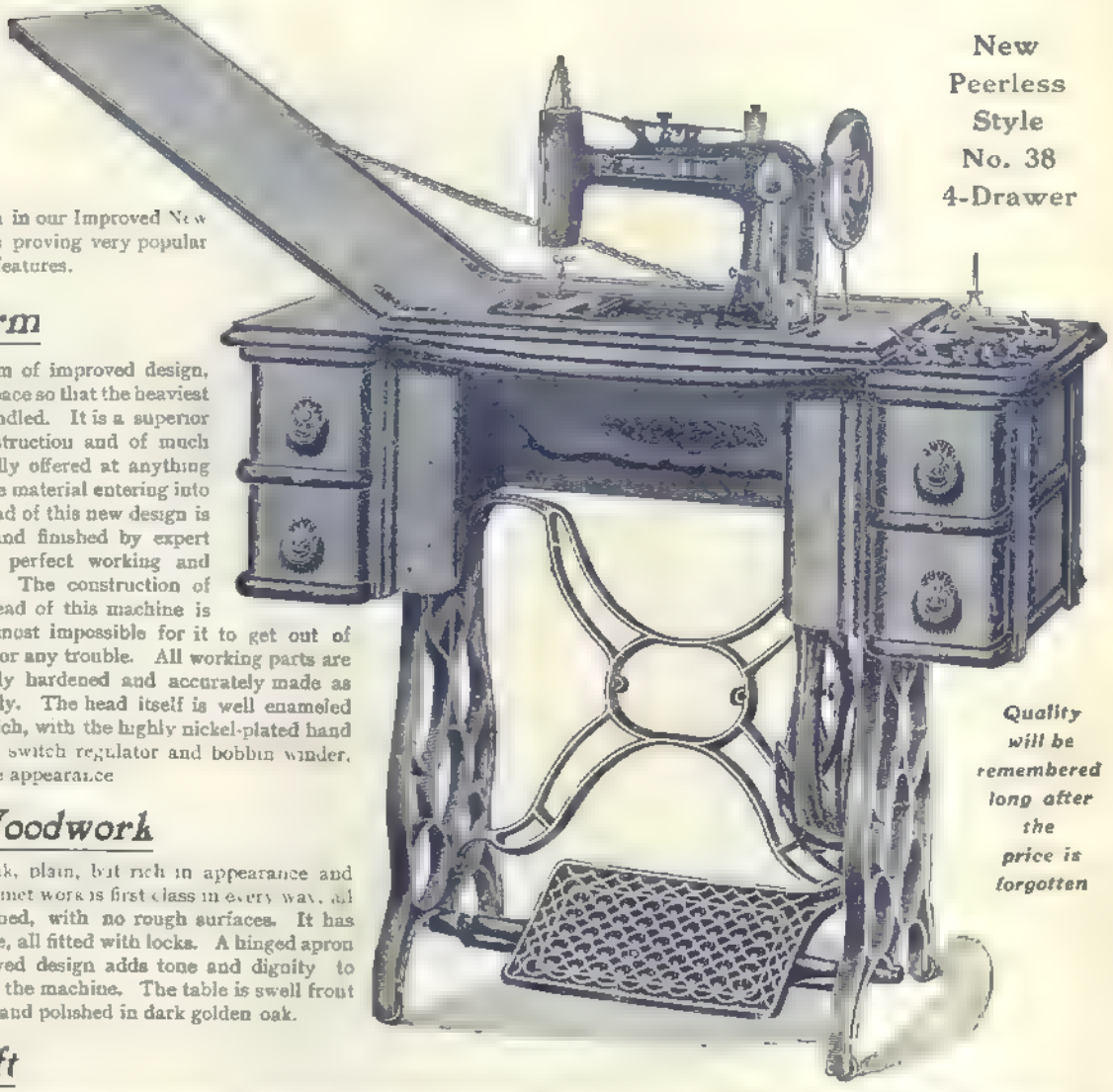
Attachments Free

With each machine we furnish free of charge one oil can, one thread cutter, one package needles, one screw driver, six bobbins, one gauge and gauge screw, and one foot hemmer. In addition to the above we furnish free of charge one complete set of steel attachments, highly nickel plated, all contained in a handsome velvet lined metal box. These attachments consist of one ruffler, one tucker, four hemmers, one shirring plate, one under braider, one binder and one quilter

Weight of machine, crated for shipment, about 125 lbs.

Style No. 27. 5 Drawer
List Price, $39.00

A NEW DESIGN



New Peerless Style No. 38 4-Drawer

Latest Style Drop Head

This is a new design in our Improved New Peerless Machines that is proving very popular owing to its many good features.

Full High Arm

It has a full high arm of improved design, allowing ample working space so that the heaviest material may be easily handled. It is a superior machine in point of construction and of much higher grade than is usually offered at anything like the price we ask. The material entering into the construction of the head of this new design is most carefully selected and finished by expert mechanics, making it a perfect working and easily operated machine. The construction of the mechanism in the head of this machine is very simple, and it is almost impossible for it to get out of order or cause the operator any trouble. All working parts are best crucible steel, specially hardened and accurately made as to work freely and perfectly. The head itself is well enameled and nicely decorated, which, with the highly nickel-plated hand wheel, face plate, tension, switch regulator and bobbin winder, gives it a very handsome appearance

Handsome Woodwork

The case is solid oak, plain, but rich in appearance and nicely finished. The cabinet work is first class in every way, all joints being perfectly joined, with no rough surfaces. It has four drawers of ample size, all fitted with locks. A hinged apron in front relieved by a carved design adds tone and dignity to the general appearance of the machine. The table is swell front in shape, with solid top, hand polished in dark golden oak.

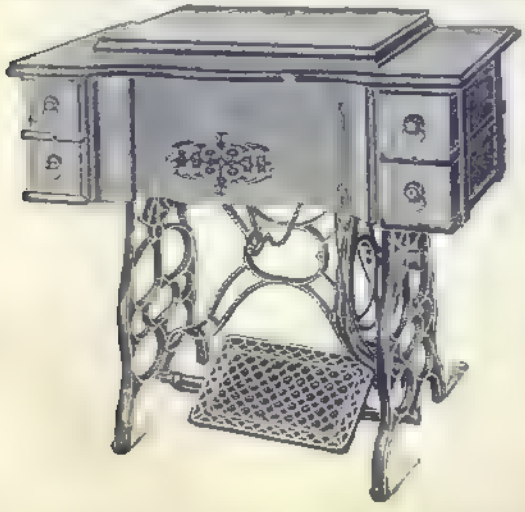
Quality will be remembered long after the price is forgotten

Automatic Lift

This machine is fitted with our automatic lift, by which the head is brought up to working position by simply raising the lid or top leaf. It automatically locks when in proper working position and is perfectly solid and secure. When through using, the head is again returned to the interior of the case by simply closing the top down.

Strong Iron Stand

This machine has the latest improved point bearing stand of handsome design, well braced and reinforced. Balance wheel is protected by wide dress guard, or shield. The specially hardened point bearings make it easy running and provide an accurate means for taking up all wear, thus doing away with the rattle and noise peculiar to some machines after they have been used for some time.



Ten Year Guarantee

This machine is so well constructed and such excellent material enters into its make-up that the manufacturers fully guarantee it against defective material or workmanship for a period of ten years.

Free Attachments

With this machine we furnish free of charge, besides the usual accessories, the complete set of nickel plated steel attachments.

If You Want

to invest only a moderate amount of money in a sewing machine you will find this New Design Improved New Peerless Machine the best on the market at the price we ask.

Style No. 38, 4-Drawer

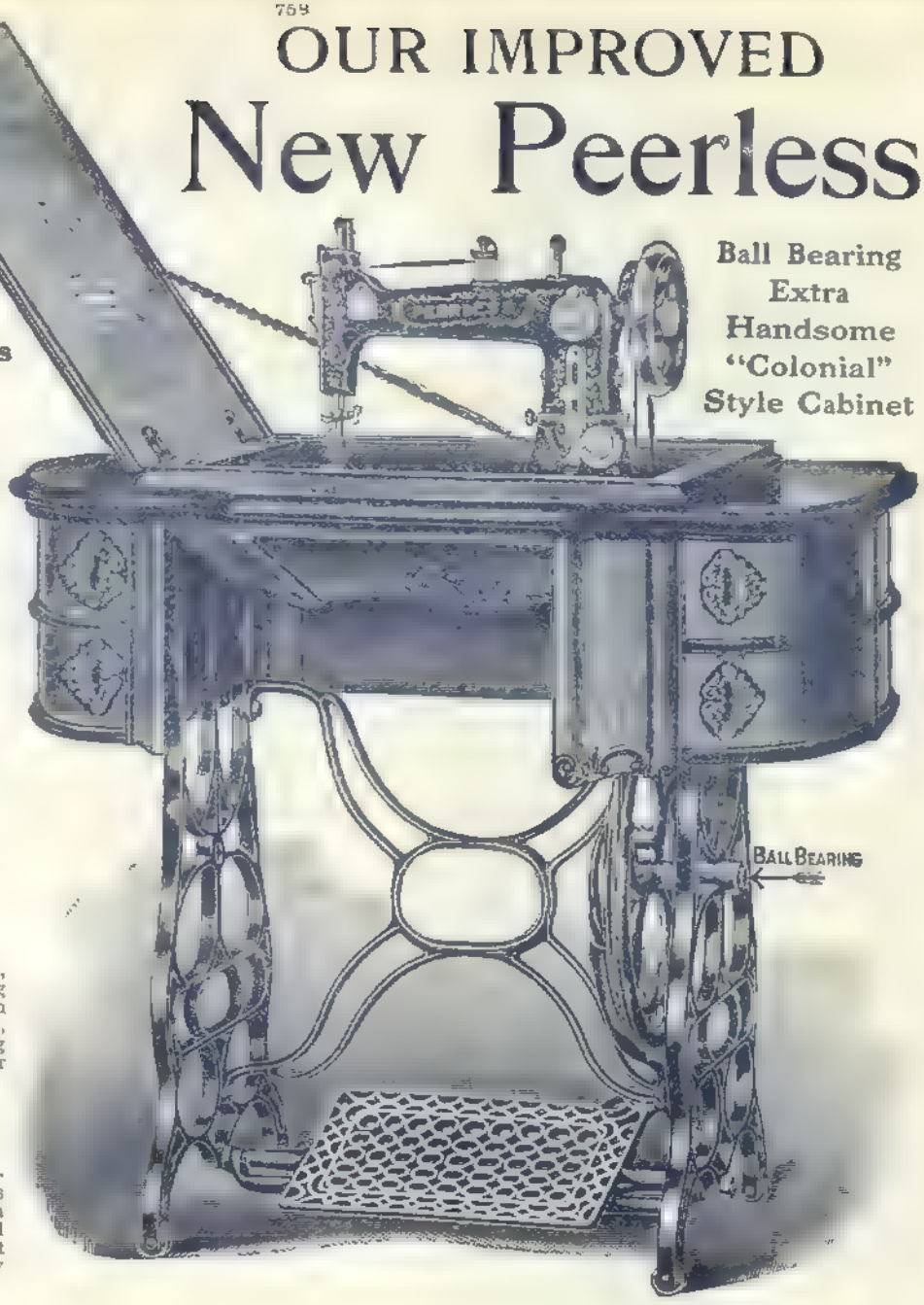
List Price - - - $42.75

THE QUALITY WILL BE REMEMBERED LONG AFTER THE PRICE IS FORGOTTEN

OUR IMPROVED New Peerless

Style No. 29-B
4-Drawer
Improved Peerless

Ball Bearing
Extra
Handsome
"Colonial"
Style Cabinet



Note fourth preceding page for illustration and thorough descriptive matter pertaining to numerous advantages of the New Peerless "B" Head which this machine is equipped with; also note that this machine is supplied with Patent Spool Tray free of charge illustrated and thoroughly described on bottom of fourth preceding page.

The Case

is genuine quarter sawed oak with swell front, drop apron, rounded ends and self-locking drawers. All drawers lock automatically when the lid is closed, and unlock when lid is lifted, thus preventing small children from pulling out the drawers and spilling contents over the floor.

The Head

is our improved New Design, with ball bearing and all modern conveniences, such as automatic bobbin winder, nickel plated stitch regulator, positive tension, double feed and steel cylinder shuttle. It has automatic lift which raises or lowers the head by simply opening or closing the top.

The Stand

is a handsome design full ball bearing, easy running and practically noiseless. It is fitted with ball bearings for balance wheel shaft and in the heads of all steel pitmen.

This Machine

is the most perfect machine ever offered at such a price, the handsomest in design and finish, the simplest mechanically and the most substantial in construction. We fully guarantee it for ten years against defective material or workmanship.

We offer in this machine the greatest bargain in the sewing machine world. This machine is strictly high grade, the handsomest, best constructed, easiest running and most popular machine ever offered at such a low price.

Attachments Free

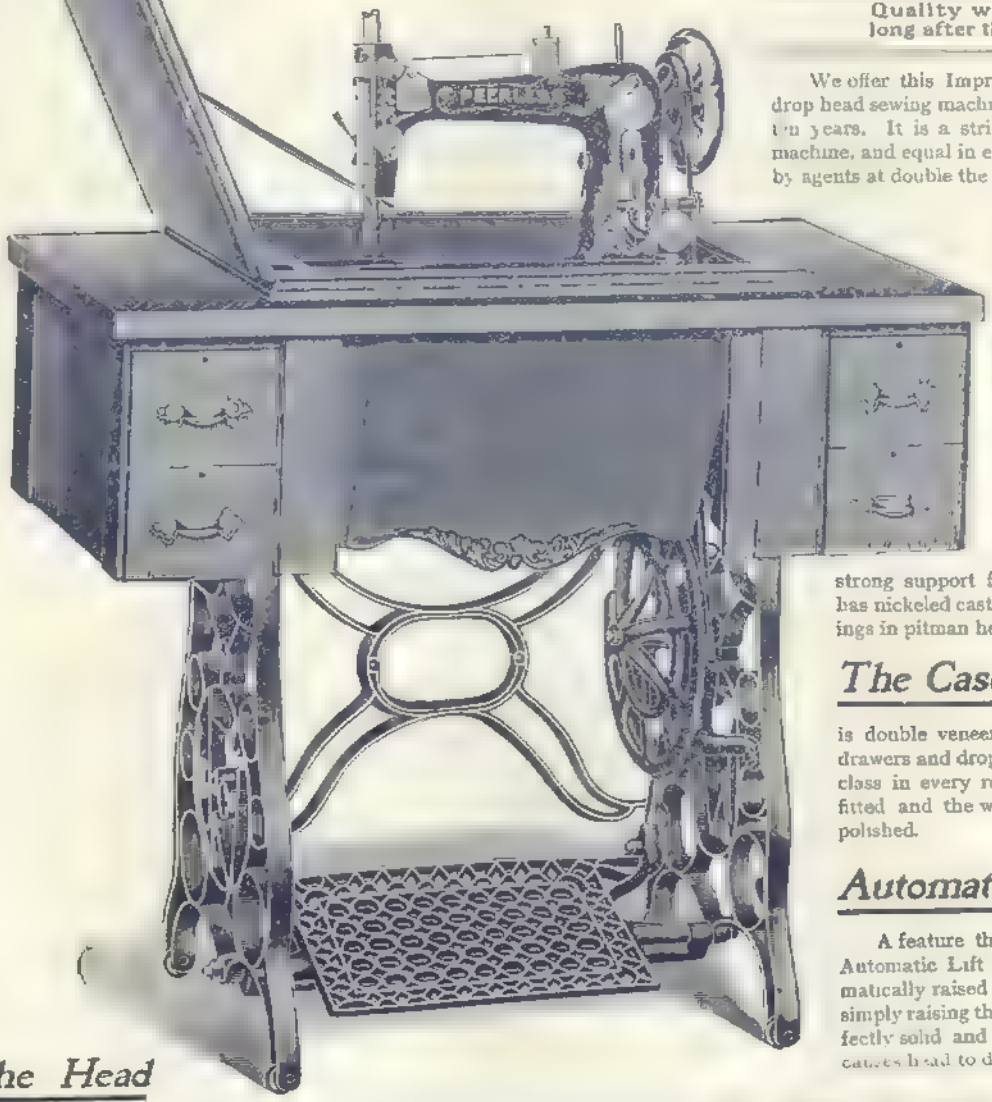
With this machine we furnish free of charge a full set of best nickel plated steel attachments. In addition to these special attachments we also furnish free of charge one dozen needles, six bobbins, oil can, screw driver, gauge and gauge screw, hemmer and feller, and complete instruction book printed in five languages.

Style No. 29-B 4-Drawer
List Price - - - $55.00

Our Improved New Peerless

New Style E12-B, 4-Drawer.

Note fifth preceding page for illustration and descriptive matter pertaining to the numerous advantages of the NEW PEERLESS "B" HEAD, with which this machine is equipped.



Quality will be remembered long after the price is forgotten.

We offer this Improved New Peerless automatic lift drop head sewing machine fully guaranteed for a period of ten years. It is a strictly high grade, full ball bearing machine, and equal in every way to machines usually sold by agents at double the price we ask.

Construction

Only the best material enters into the construction of this machine. It is built by skilled mechanics who are experts in sewing machine work.

The Stand

is the ribbon style, of neat design, well braced and nicely enameled, making an attractive, light and strong support for the case and head. The stand has nickeled castors, steel pitman with full ball bearings in pitman heads and balance wheel.

The Case

is double veneered oak with handsomely paneled drawers and drop apron. The cabinet work is first-class in every respect, every part being perfectly fitted and the whole is nicely finished and highly polished.

Automatic Lift

A feature that will be appreciated by all is the Automatic Lift Device, by which the head is automatically raised to the proper working position by simply raising the leaf or lid. The head remains perfectly solid and secure until closing the lid, which causes head to disappear with ease.

The Head

is our improved high arm design with point bearings, making it a quiet easy running machine. The head is nicely enameled with seven coats of French enamel and neatly decorated. It is fitted with automatic bobbin winder, nickel plated stitch regulator with accurate scale, nickel plated drop feed, tension and our positive double feed. The hand wheel and face plate are heavily nickel plated, making it a very handsome machine.

Easy to Operate

The full ball bearing steel pitman ball bearing balance wheel and ball bearings in the head, make it an exceedingly quiet, easy running machine. It will accomplish a wide range of work with perfect satisfaction to the operator.

Extra Attachments Without Cost

With each machine we furnish in a handsome velvet lined, metal case, the full set of attachments.

Our Ten Year Guarantee

covers this Improved New Peerless Sewing Machine. We guarantee it for a period of ten years against defects in material or workmanship. If the best material did not enter into its construction, if we did not use the most skilled workmen, we could not afford to give a guarantee for as long a period as this.

Style No. E12=B, 4=Drawer, List Price $56.75

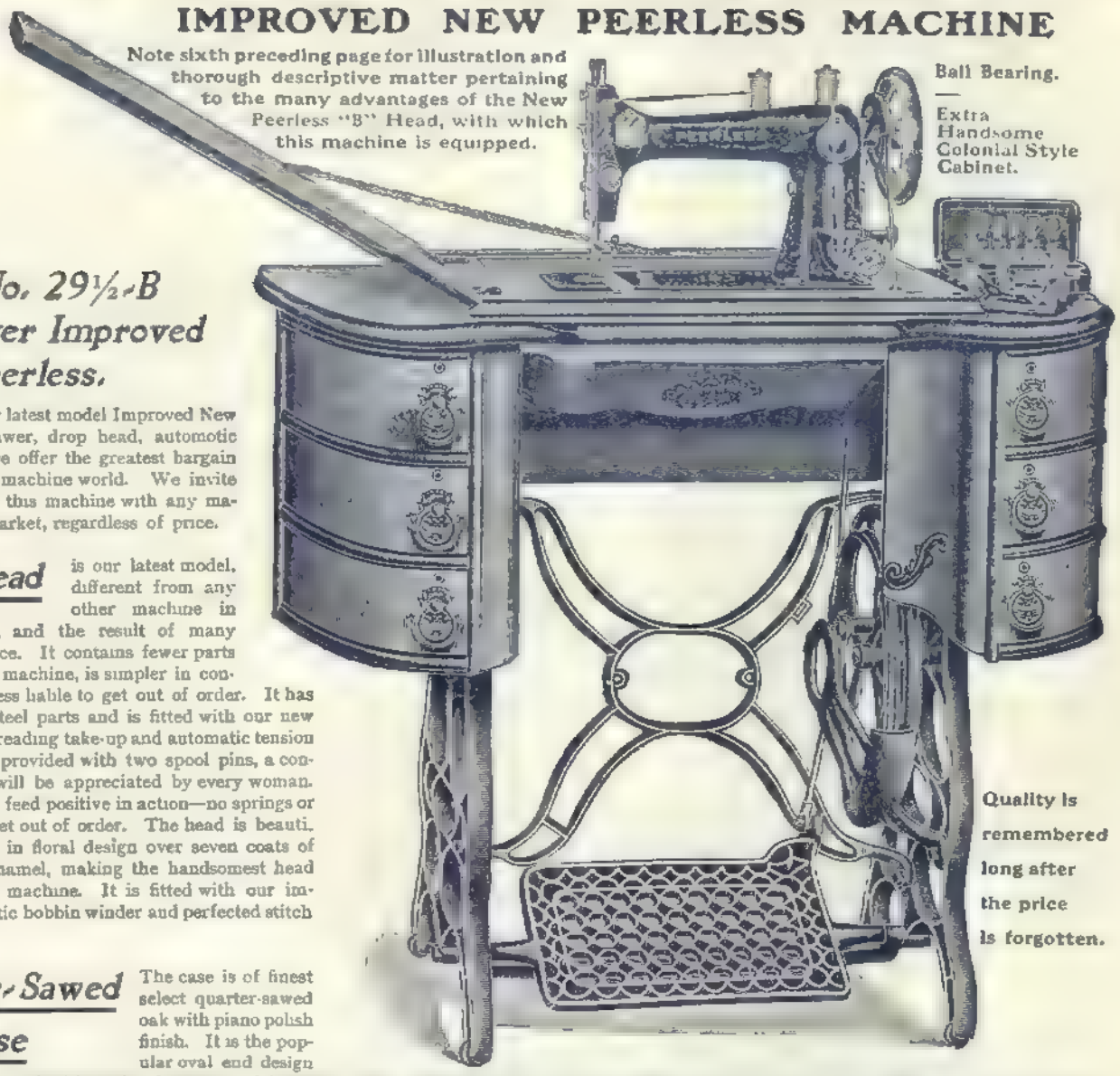
OUR LATEST MODEL

IMPROVED NEW PEERLESS MACHINE

Note sixth preceding page for illustration and thorough descriptive matter pertaining to the many advantages of the New Peerless "B" Head, with which this machine is equipped.

Ball Bearing.

Extra Handsome Colonial Style Cabinet.



Style No. 29½-B 6-Drawer Improved New Peerless.

In this, our latest model Improved New Peerless, 6-drawer, drop head, automotic lift machine, we offer the greatest bargain in the sewing machine world. We invite comparison of this machine with any machine on the market, regardless of price.

Quality is remembered long after the price is forgotten.

The Head

is our latest model, different from any other machine in this catalogue, and the result of many years' experience. It contains fewer parts than any other machine, is simpler in construction and less liable to get out of order. It has all hardened steel parts and is fitted with our new positive self-threading take-up and automatic tension release. It is provided with two spool pins, a convenience that will be appreciated by every woman. It has a double feed positive in action—no springs or loose parts to get out of order. The head is beautifully decorated in floral design over seven coats of best French enamel, making the handsomest head shown on any machine. It is fitted with our improved automatic bobbin winder and perfected stitch regulator.

Quarter-Sawed Oak Case

The case is of finest select quarter-sawed oak with piano polish finish. It is the popular oval end design that made our No. 29½-B such a favorite, and like it, has the automatic drawer locking device. A tape-measure inserted in the top of the table is a great convenience to the operator. The drop-apron front of quarter sawed oak is decorated with a handsome medallion carving. We furnish this case with either four or six drawers, as priced below. One drawer is fitted with velvet covered thread tray and pin cushion which will accomodate one dozen spools of thread.

Highest Grade Stand

The ribbon style stand to this machine is one of the handsomest designs ever shown. The stand is one inch higher than on any other machine, allowing more knee room for the operator. It is fitted with bright steel pitman, with ball bearing heads and ball bearings in balance wheel, making it the lightest running and quietest machine on the market today. The highest grade made, regardless of price.

Self-Belting Device

The self-belting device is an unique feature of this machine. It is not necessary to use your hands to belt the balance wheel on this machine. By simply pressing the treadle with the foot, the balance wheel is automatically belted.

Machine Closed.

Other Features

that will be appreciated by every woman are the self-threading steel cylinder shuttle, which requires no hand threading; the automatic tension release that loosens the thread tension by simply raising the presser foot; and the automatic lift and self-locking device, the latter being a feature not found in other makes of machines.

No Better Machine

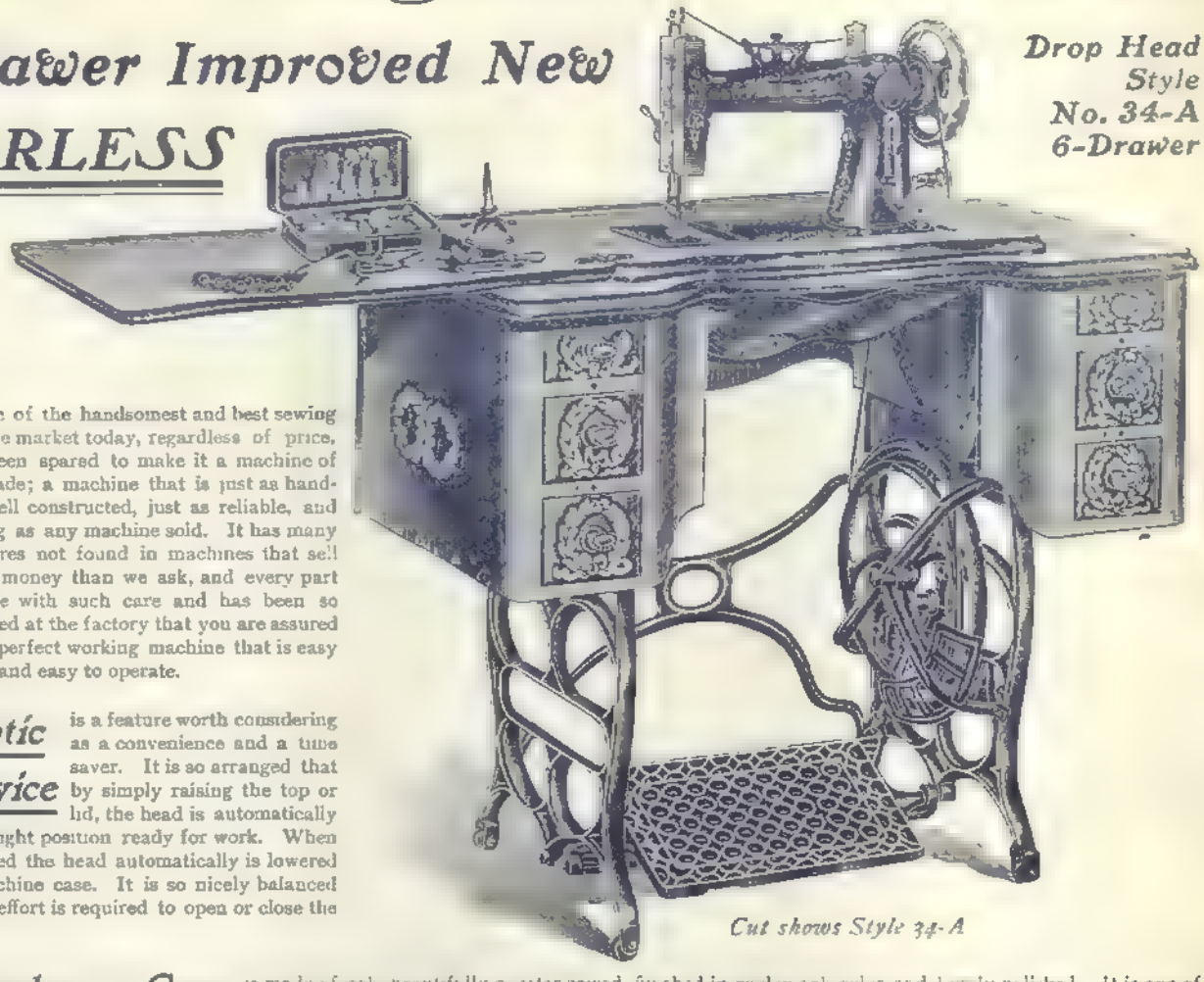
is sold at any price. Every part is perfect and of highest grade and this machine is equal in every respect to the highest grade machines sold by agents at $60.00 to $75.00. It is guaranteed fully for ten years. A complete set of attachments are furnished free of charge. Shipping weight 135 lbs. Shipped from factory near Chicago.

Style No. 29½-B, 6-Drawer.....List Price, $58.50

Our Highest Grade

6-Drawer Improved New PEERLESS

Drop Head Style No. 34-A 6-Drawer



Cut shows Style 34-A

This is one of the handsomest and best sewing machines on the market today, regardless of price. Nothing has been spared to make it a machine of the highest grade; a machine that is just as handsome, just as well constructed, just as reliable, and will last as long as any machine sold. It has many desirable features not found in machines that sell for much more money than we ask, and every part has been made with such care and has been so thoroughly tested at the factory that you are assured of receiving a perfect working machine that is easy to understand and easy to operate.

Automatic Lift Device is a feature worth considering as a convenience and a time saver. It is so arranged that by simply raising the top or lid, the head is automatically lifted to an upright position ready for work. When the top is closed the head automatically is lowered within the machine case. It is so nicely balanced that but slight effort is required to open or close the machine.

The Handsome Case is made of oak, beautifully quarter-sawed, finished in golden oak color and highly polished. It is one of the handsomest cases used on any machine, regardless of price. The front is serpentine shaped with a beautifully grained apron decorated with a single carved wreath. The front of each of the six drawers and the ends of case are similarly decorated.

Ball Bearing Stand This high grade Improved New Peerless machine would not be complete without our latest style ball bearings. Not only are the bearings of the balance wheel ball bearings, with the latest approved adjustable cones and ball retainers, but the bright steel pitman has ball bearings at both ends, making it light running and noiseless. The stand is ribbon style of neat design and strong braces, affording a firm and steady support for cabinet and head.

New Improved Head This machine is fitted with our new improved head, with ball bearings. The mechanism is so simple and parts so few that there is scarcely a chance of its getting out of order or causing any trouble. The head is nicely finished with seven coats of baked-on French enamel and handsomely decorated. It is fitted with our improved automatic bobbin winder, self-threading steel shuttle and latest design stitch regulator with accurate scale for regulating the stitches for different kinds of material. The hand wheel, face plate, tension, automatic bobbin winder and stitch regulator are all highly nickel plated.

Ten Year Warranty This machine is warranted by the manufacturer against defective material or workmanship (shuttle, needles and bobbin excepted) for a period of ten years.

No Other House offers such a high grade machine for so little money. Some may offer machines similar in outer appearance, but a careful examination and comparison will convince you that none give such good material, perfect workmanship and up-to-date improvements as are found in our Improved New Peerless. This machine is equal in every way to machines sold by sewing machine agents throughout the country for $40.00 to $60.00. If you order one of these machines and after receiving it and testing it in your own home, you are not convinced that you have received a machine equal in every way, in appearance, construction, finish and reliability, to machines sold by agents at double the price we ask, you are at liberty to return the machine to us by freight at our expense of freight both ways and we will cheerfully refund the money. We could not afford to make you this offer if this machine was not all we claim it to be.

STYLE No. 34-A, 6-Drawer ..... List Price, $58.50

STYLE No. 34-B, 6-Drawer, Equipped with "B" Head ..... List Price, 62.25

NOTE. *See Seventh preceding page for illustration and thorough description pertaining to the many advantages of the New Peerless "B" Head, with which Style 34-B is equipped with.*

OUR IMPROVED NEW PEERLESS CABINET MACHINE

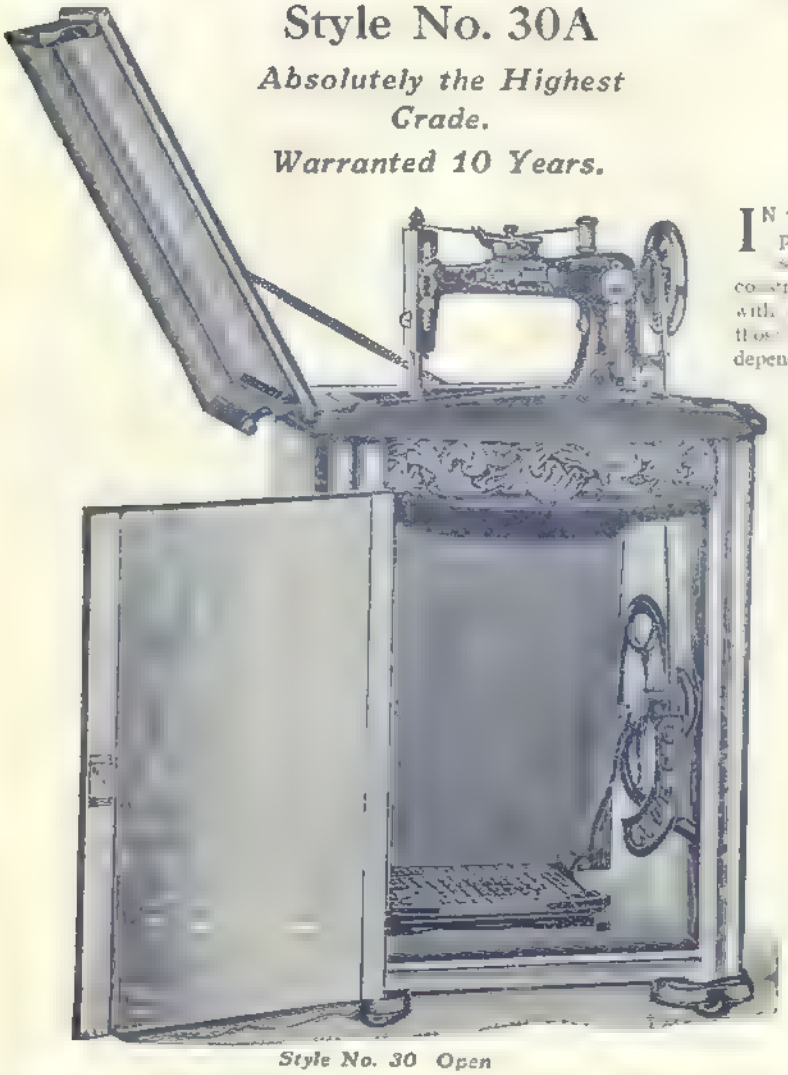
Style No. 30A

Absolutely the Highest Grade.

Warranted 10 Years.

Extra Handsome "Colonial" Style Cabinet with Rich Hand Carvings.

ATTACHMENTS FREE.



Style No. 30 Open

IN this machine are combined all those features of beauty and practicability which comprise the highest in every respect in sewing machine construction. Mechanically, the machine is constructed precisely like the Improved New Peerless, No. 34, with ball bearing balance wheel, all bearings in hard and all those parts which make the treadle the easiest running, most dependable, durable machine on the market. Only in the fact that when closed it resembles an artistic desk does it differ from the other.

Quarter-Sawed Oak of the best grade, polished to a mirror-like brilliancy and smoothness, is used in the construction of this really beautiful case. Not much carving is put on as the beauty of the wood and the finish excel by far the effect which is produced by elaborate carving. The grain and polish of the oak is its own best decoration. The very simplicity of the lines of the case comprise its great beauty. The single design gives an effect of breadth and dignity. A panel of serpentine outline is set in a frame which is in turn set off by the rounded, pillar-like corners on each side and scroll carving at the top.

A Convenient Compartment subdivides into three sections, is behind this swell carving and is designed to hold the accessories of the machine. This is covered by a lid, which cannot be lifted when the machine is closed, making it impossible for children to tamper with the contents of the compartment. A rail around three sides of the top of the case increases the desk effect of the case.

Beauty is not the only object in having the treadle operated in this way. It can readily be understood that the ribbon effect stands, which present so many intricate surfaces will catch dust readily and will require watchful dusting to keep them in trim, which is entirely eliminated in the Improved New Peerless Automatic Lift Cabinet Machine. The machine is fitted with castors and is easily moved about.

The Automatic Lift arrangement draws the head into firm working position merely by lifting the lid, and so nicely is this adjusted that no exertion is required to accomplish this. The machine stands 29½ inches from the floor when open, and the top is 25x20 inches when closed. The head has all the features which distinguish our Improved New Peerless Machines. Positive double tension, stitch regulator for regulating the size of stitches according to the material used, automatic bobbin-winder, and self-threading cylinder shuttle. Seven coats of baked-on French enamel, hand-polished, ornamented with a delicately traced design, form a head of striking beauty, increased by the several nickel parts already enumerated in the description of our Improved New Peerless, Style 34.

Remember that in addition to being an artistic piece of furniture this is the finest machine on the market for actual every-day use. You could not buy a machine that will run more easily, do more satisfactory work or need less attention. The machine once started in motion, will require almost no exertion to keep up the motion, so accurately is the treadle connected with the ball bearing balance wheel by the strong wood pitman. The parts are simple, so the chance of the machine getting out of order is reduced to a minimum. The head is fitted with a double eccentric, so connected as to make it an easy matter to take up any lost motion that might occur after the machine has been used for a number of years and the parts become worn loose.

Style No. 30A Closed

Style No. 30A Cabinet

List Price - - - - $56.75

IRON PLANES WITH CORRUGATED BOTTOMS

Ohio Tool Co.'s

HANDLED SMOOTH

No. 04C

No. 02C.	7 in. in length, 1⅝ in. cutter, each	$2 75
No. 03C.	8 in. in length, 1¾ in. cutter, each	3 00
No. 04C.	9 in. in length, 2 in. cutter, each	3 25
No. 04¼C.	9½ in. in length, 2¼ in. cutter, each	3 60
No. 04½C.	10 in. in length, 2⅜ in. cutter, each	3 75

JACK

No. 05C

No. 05C.	14 in. in length, 2 in. cutter, each	$3 75
No. 05¼C.	14 in. in length, 2⅛ in. cutter, each	4 00
No. 05½C.	15 in. in length, 2⅛ in. cutter, each	4 25
No. 05¾C.	15 in. in length, 2⅜ in. cutter, each	4 50

FORE

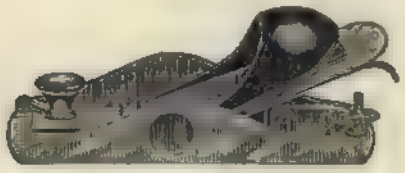
No. 06C. 18 in. in length, 2⅜ in. cutter, each.....$4.75

JOINTER

No. 07C.	22 in. in length, 2⅛ in. cutter, each	$5 50
No. 08C.	24 in. in length, 2⅝ in. cutter, each	6 50

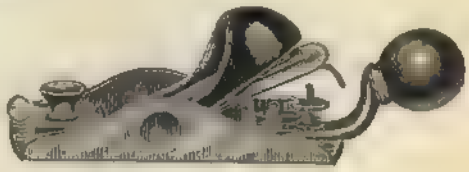
Packed one in a paper box

BLOCK PLANES



No. 09½

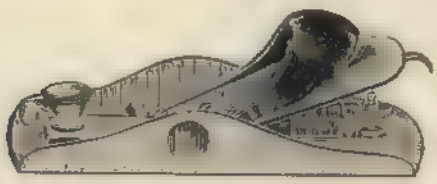
No. 09½. Block plane, lateral and longitudinal adjustment, 6 in. in length, 1⅝ in. cutter, each $1 60



Nos. 09¾, 015½

No. 09¾. Rosewood handle, 6 in. in length, 1⅝ in. cutter, each $1.85

No. 015½. Rosewood handle, 7 in. in length, 1⅝ in. cutter, each 1.95

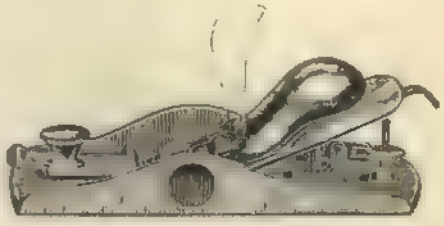


No. 015

No. 015. Block plane, lateral and longitudinal adjustment, 7 in. in length, 1⅝ in. cutter, each.$1.70

No. 09⅝. Block plane, lateral and longitudinal adjustment, 6 in. in length, 1⅝ in. cutter, nickel trimmings, each 1.75

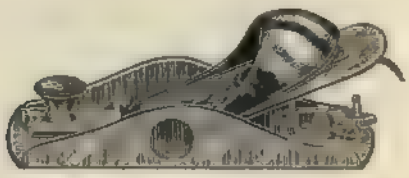
No. 015⅝. Block plane lateral and longitudinal adjustment 7 in. in length 1⅝ in. cutter, nickel trimmings, each 1.85



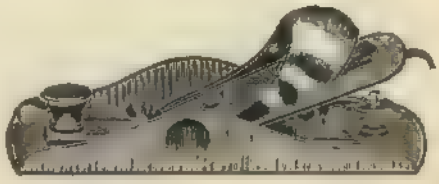
Nos. 018, 019

No. 018. Knuckle joint block plane, nickel trimmings, 6 in. in length, 1⅝ in. cutter, each.....$1.85

No. 019. Knuckle joint block plane nickel trimmings, 7 in. in length, 1⅝ in. cutter each 1.95



*No. 016. Nickel trimmings 6 in. in length, 1⅝ in. cutter, each $1.75



No. 017. Nickel trimmings, 7 in. in length, 1⅝ in. cutter, each $1 85

One in a paper box

BLOCK PLANES

Ohio Tool Co.'s

No. 060

No. 060½. Low angle block plane, lateral and longitudinal adjustment, 6 in. in length, 1⅝ in. cutter, each $1.70

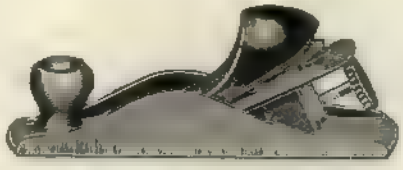
No. 060. Low angle block plane, lateral and longitudinal adjustment, 6 in. in length, 1⅝ in. cutter, nickel trimmings, each 1 90

No. 065

No. 065½. Low angle block plane, lateral and longitudinal adjustment, 7 in. in length, 1⅝ in. cutter, each $1 80

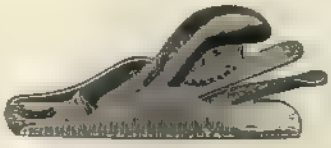
No. 065. Low angle block plane, lateral and longitudinal adjustment, 7 in. in length, 1⅝ in. cutter, nickel trimmings, each . 2 10

No. 0130. Block plane, double ender, 8 in. in length, 1⅝ in. cutter, each.....$1 00

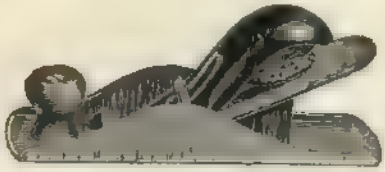


No. 0220. Block plane, adjustable, 7 in. in length, 1⅝ in. cutter, each $1 00

No. 0102. Block plane, 5½ in. in length, 1⅝ in. cutter, each $0 55



No. 0103. Block plane, adjustable, 5½ in. in length, 1⅝ in. cutter, each $0 70



No. 0110. Block plane, 7½ in. in length, 1⅝ in. cutter, each $0.70

No. 0120. Block plane, adjustable, 7 inches in length, 1⅝ in. cutter, each. . . $0 95

No. 0101

No. 0101. Block plane, 3½ inches in length, 1 in. cutter, each $0.25

No. 0100 with Handle

No. 0100. Block plane, handled, 3½ in. in length, 1 in. cutter, each.....$0.33

One in a paper box

*PLANES

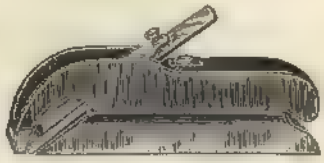
Ohio Tool Co.'s

RABBET AND BLOCK PLANE

No. 0140

No. 0140. Rabbet and block plane, 7 in in length, 1¾ in. cutter, each.....$1.60

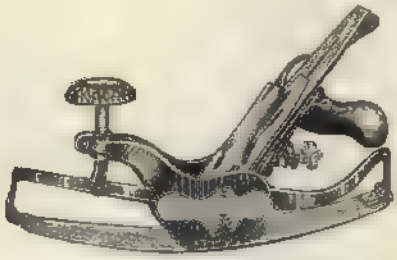
BULL-NOSE RABBET PLANE



No. 075

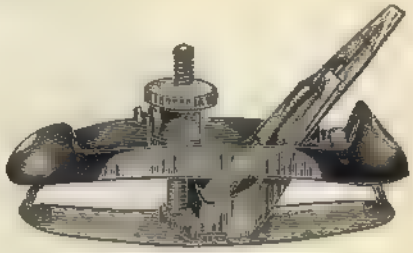
No. 075. Iron stock, 4 in. in length, 1 in cutter, each. $0.55

ADJUSTABLE CIRCULAR PLANES



No. 0113

No. 0113. Adjustable circular plane, 1¾ in. cutter, each $2 75



No. 020

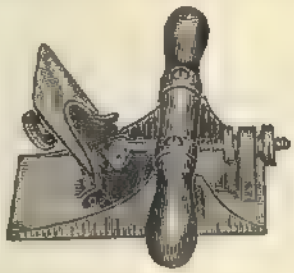
No. 020. Adjustable circular plane, nickel-plated, 1¾ in. cutter, each.....$3.75

No. 020½. Adjustable circular plane, 1¾ in. cutter, each..... 3 15

ADJUSTABLE SCRAPER PLANE

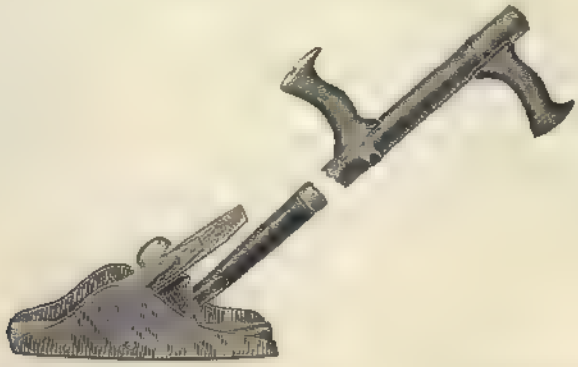
No. 0112. Adjustable scraper plane, 9 in. in length, 3 in cutter, each $2.00

ADJUSTABLE VENEER SCRAPER



No. 012. Adjustable veneer scraper, 3 in. cutter, each..$2.25

OHIO FLOOR PLANE



A labor saver. Weight of plane, about 10 pounds. Full length of handle, 45 inches.

No. 074. Floor plane, 10½ in. in length, 2⅝ in. cutter ..... each, $4.50

*Not carried in stock. *One in a paper box*

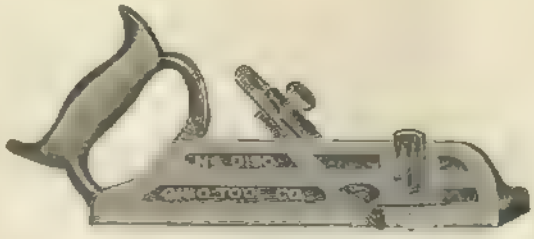
*PLANES

Ohio Tool Co.'s

IMPROVED RABBET PLANES

No. 0180

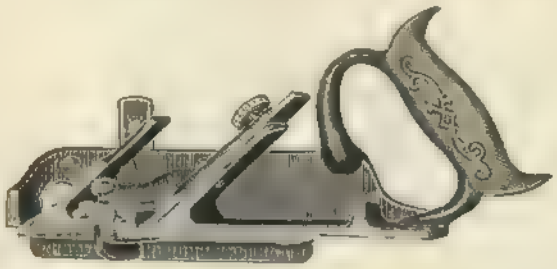
No. 0180. Iron stock, 8 in. in length, 1⅝ in. wide, each $1.00
No. 0181. Iron stock, 8 in. in length, 1¾ in. wide, each 1 00
No. 0182. Iron stock, 8 in in length, 1 in. wide, each.. 1.00



No. 0190

No. 0190. Iron stock, 8 in. in length [illegible] with spur, each $1 15
No. 0191. Iron stock, 8 in. in length, [illegible] with spur, each 1.15
No. 0192. Iron stock, 8 in. in length, 1 in. wide, with spur, each 1 15

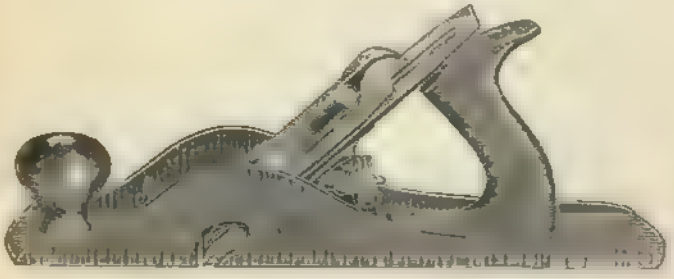
OHIO RABBET PLANE AND FILLETSTER

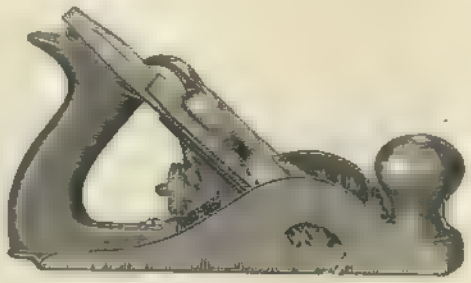


This plane is fitted with a reversible arm and can be used as either a right or left-hand Filletster. Two seats are provided for the cutter and the plane may be used as a Bull-nose Rabbet by using the forward seat.

No. 078. Iron stock and fence, 8½ in. long, 1½ in cutter ..... each $1 50

CARRIAGEMAKERS' RABBET PLANES





No. 010. 13 in. in length, 2⅛ in. cutter, each..... $5 20

No. 010½. 9 in. in length, 2⅛ in. cutter, each $4 30

CARRIAGEMAKERS' RABBET PLANES WITH CORRUGATED BOTTOMS

No. 010½C. 9 in. in length, 2⅛ in. cutter ..... each $4 30
No. 010C. 13 in in length, 2⅛ in. cutter... ..... each 5 20

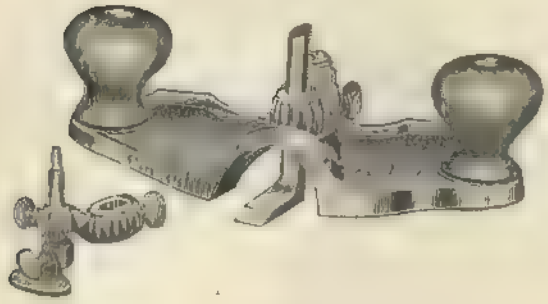
*Not carried in stock

One in a paper box

*PLANES

Ohio Tool Co.'s

ROUTER PLANE



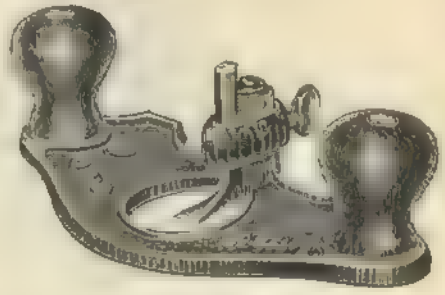
No. 071

The small attachment shown in cut is furnished with each plane, and may be substituted for the collar that holds the cutter when the work requires a plane with a closed throat.

No. 071. Nickel-plated stock, with steel bits each ¼ and ½-inch, each $1 85

ROUTER PLANE

With Closed Throat



No. 071½

The bits may also be clamped to the back side of the upright post and outside of the stock. In this position they will reach into corners, router out mortises or smooth surfaces hard to reach with other tools.

No. 071½. Nickel-plated stock, with steel bits each ¼ and ½-inch, each .. $1 50

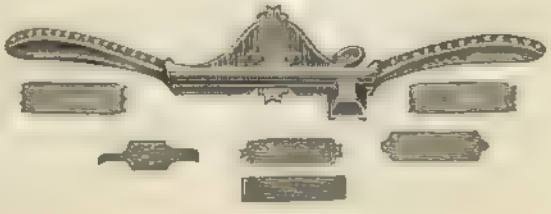
CAR BEADING PLANES

Side View

No. 067. Iron stock 7 in. in length, with low angle bit, each $2.50

No. 068. Made from beechwood, with low angle bit and steel face, each.....$2.50

HAND BEADER



No. 066. Nickel-plated stock with seven steel cutters .....each, $1.00

Note. Each tool furnished with seven steel cutters, both ends being sharpened. This will include six ordinary sizes of beads, four sets of reeds, two fluters, and a double router iron (⅛ and ¼ inch).

*Not carried in stock. *One in a paper box*

WOOD BOTTOM PLANES

Ohio Tool Co.'s

SMOOTH

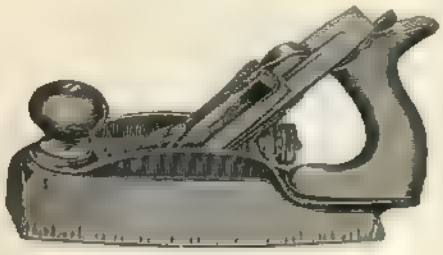
No. 024

No. 025

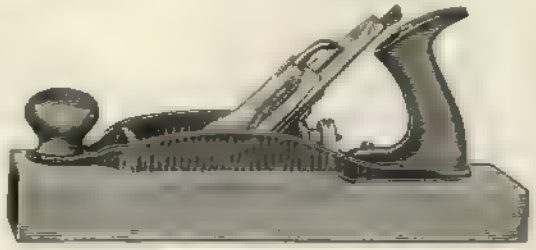
No. 021. 7 in. in length, 1¾ in. cutter, each.....$2.00
No. 022. 8 in. in length, 1¾ in. cutter, each..... 2.00
No. 023. 9 in. in length, 1¾ in. cutter, each..... 2.00

No. 024. 8 in. in length, 2 in. cutter, each..... $2 00
No. 025. Block plane, 9½ in. in length, 1¾ in. cutter, each 2 00

HANDLED SMOOTH



No. 035



No. 037

No. 035. 9 in. in length, 2 in. cutter, each $2 50
No. 036. 10 in. in length, 2⅜ in. cutter each 2 75

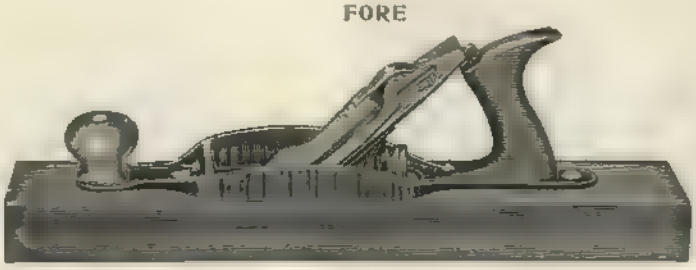
No. 037. Handled smooth, 13 in. in length, 2⅜ in. cutter, each $3 00

JACK

No. 026

No. 026. 15 in. in length, 2 in. cutter, each $2 25
No. 027. 15 in. in length, 2⅛ in. cutter, each 2 50
No. 027½. 15 in. in length, 2⅜ in. cutter, each 2 50

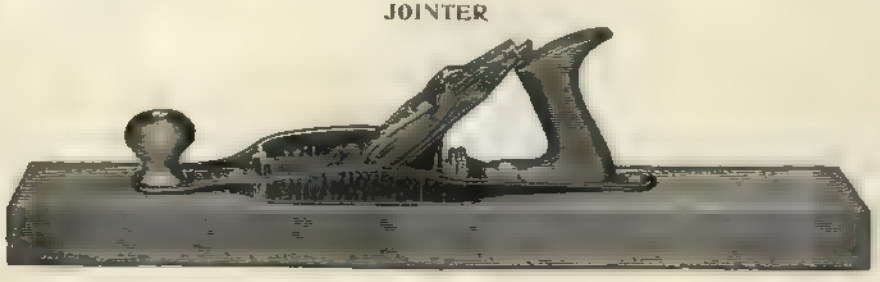
FORE



No. 028

No. 028. 18 in. in length, 2⅜ in. cutter, each..... $2 75
No. 029. 20 in. in length, 2⅜ in. cutter, each..... 2 75

JOINTER



No. 032

No. 030. 22 in. in length, 2⅜ in. cutter, each.....$3.00
No. 031. 24 in. in length, 2⅜ in. cutter, each..... 3.00
No. 032. 26 in. in length, 2⅜ in. cutter, each..... 3.25

No. 033. 28 in. in length, 2⅜ in. cutter, each.....$3 25
No. 034. 30 in. in length, 2⅜ in. cutter, each..... 3.50

One in a paper box

WOOD BOTTOM PLANES

ADJUSTED BY A LEVER

SMOOTH

No. 0122. Smooth plane, 8 in. in length, 1¾ in. cutter, each $1 50

HANDLED SMOOTH

No. 0135. Handled smooth, 10 in. in length, 2⅜ in. cutter, each $2 00

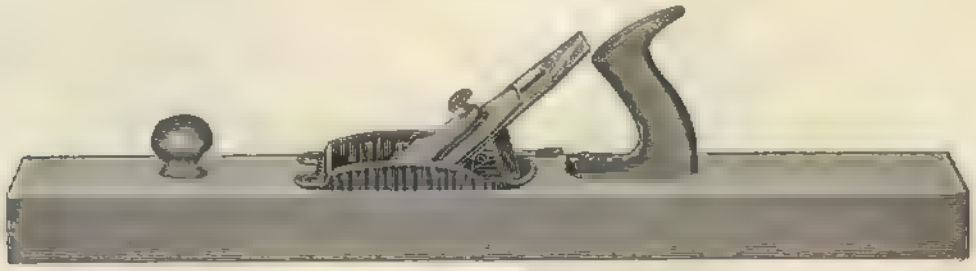
JACK

No. 0127. Jack plane, 15 in. in length, 2⅜ in. cutter..... each, $2.00

FORE

No. 0129. Fore plane, 20 in. in length, 2⅜ in. cutter..... each, $2 25

JOINTER

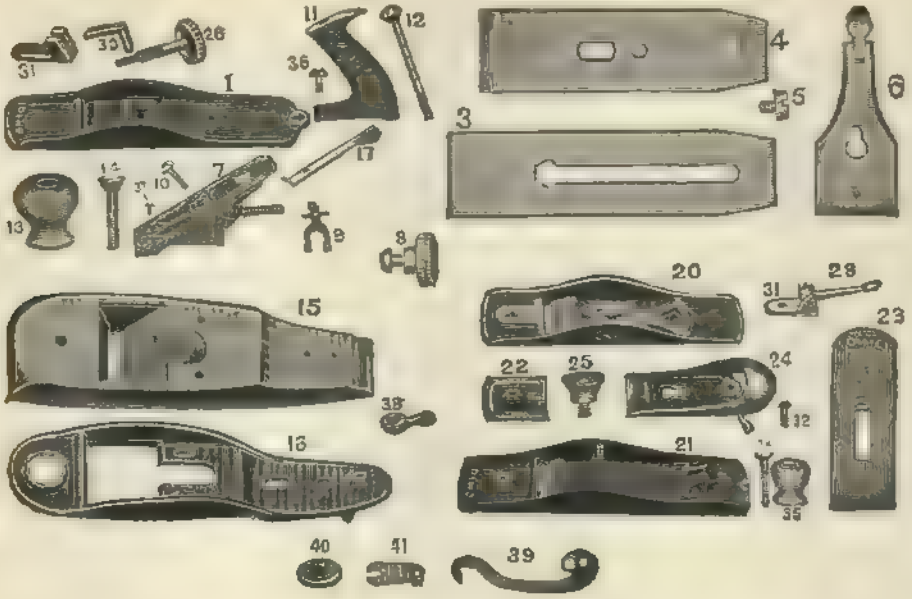


No. 0132. Jointer plane, 26 in. in length, 2⅝ in. cutter..... each, $2.50

One in a paper box

*PARTS FOR OHIO PLANES

In ordering any part, always specify the number of the plane for which it is wanted.



PARTS OF ADJUSTABLE IRON AND WOOD BOTTOM PLANES

No. 1. Bottom (iron plane)
No. 3. Plane iron
No. 4. Plane iron cap
No. 5. Plane iron screw
No. 6. Clamp
No. 7. Frog
No. 8. Brass adjusting nut
No. 9. "Y" adjusting lever
No. 10. Clamp screw
No. 11. Handle
No. 12. Handle bolt
No. 13. Knob
No. 14. Knob bolt
No. 15. Bottom (wood plane)
No. 16. Top casting (wood plane)
No. 17. Lateral adjusting lever
No. 36. Handle screw
No. 37. Frog Screw

PARTS OF BLOCK PLANES

No. 20. Bottom (adjustable throat)
No. 21. Bottom
No. 22. Mouth piece
No. 23. Plane iron
No. 24. Clamp
No. 25. Brass knob
No. 26. Adjusting screw
No. 28. Adjusting lever
No. 30. Set ng lever
No. 31. Adjustable frog
No. 32. Clamp screw
No. 34. Knob bolt
No. 35. Wood knob
No. 38. Throat adjusting lever
No. 39. Lateral adjusting lever
No. 40. Adjusting nut
No. 41. Longitudinal adjusting lever

PARTS OF IRON PLANES

Iron Planes	Bottom No. 1	Frog Complete No. 7	Clamp No. 6	Handle No. 11	Knob No. 13	Handle Bolt No. 12	Adjusting Nut No. 8	Frog Screw No. 37 Per Dozen	Clamp Screw No. 10 Per Dozen
01	$1 20	$0 65	$0.45	$0 35	$0 27	$0 10	$0 15	$0 70	$0 70
02 or 02C	1.55	.65	.45	35	27	10	15	70	70
03 or 03C	1.80	.65	.45	35	27	10	15	70	70
04 or 04C	1.80	65	45	35	27	10	15	70	70
04¼ or 04¼C	2 00	65	45	35	27	10	15	70	70
04½ or 04½C	2 00	65	45	35	27	10	15	70	70
05 or 05C	2 20	65	45	35	27	10	15	70	70
05¼ or 05¼C	2 20	65	45	35	27	10	15	70	70
05½ or 05½C	2 20	65	45	35	27	10	15	70	70
05¾ or 05¾C	2 40	65	45	35	27	10	15	70	70
06 or 06C	3 00	65	45	35	27	10	15	70	70
07 or 07C	4 25	65	45	35	27	10	15	70	70
08 or 08C	5 25	65	45	35	27	10	15	70	70
010 or 010C	3 00	65	45	35	27	10	15	70	70
010½ or 010½C	2.75	65	45	35	27	10	15	70	70
012	2 20	65	45	65			15	70	70
0112	2.20	65	35	35	27	20	15		
040	1.25		30	80	27	20			

*Not carried in stock.

*PARTS FOR OHIO PLANES

In ordering any part, the number of the plane for which the part is wanted should be given.

WOOD BOTTOM PLANES

For Plane No.	Bottom No. 5	Frog Complete No. 7	Clamp No. 6	Handle No. 31	Knob No. [illegible]	Handle Bolt No. 13	Adjusting Nut No. 8	Lever Cap and Screw No. 9	Frog Screws No. 3 Per Dozen	Cap Screw No. 10 Per Dozen
021	$0 75	$0 55	$0 35		$ 20	$0 10	$0 5	$0 35	$ 70	$0 70
022	75	55	35		20	10	15	35	70	70
023	75	55	35		20	10	15	35	70	70
024	75	55	35		20	10	15	35	70	70
025	75	55	35		20	10	15	35	70	70
026	90	55	35	$ 20	20	10	15	35	70	70
027	90	55	35	20	20	10	15	35	70	70
027½	90	55	35	20	20	10	15	35	70	70
028	1 25	55	35	20	.20	10	15	35	70	70
029	1 25	55	35	20	20	10	15	35	70	70
030	1 48	55	35	20	.20	10	15	35	70	70
031	1 48	55	35	20	.20	10	15	35	70	70
032	1 55	55	35	20	.20	10	15	35	70	70
033	1 55	55	35	20	.20	10	15	35	70	70
034	1 55	55	35	20	.20	10	15	35	70	70
035	75	55	35	20	.20	10	15	35	70	70
036	90	55	35	20	.20	10	15	35	70	70
037	1 25	55	35	20	.20	10	15	35	70	70
0122	75		20		.20			55		
0127	90		20	20	.20	10		55		
0129	1 25		20	20	.20	10		55		
0132	1 55		20	20	.20	10		55		
0135	75		20	20	.20	10		55		

BLOCK PLANES

For Plane No.	Bottom Nos. 20 and 21	Clamp No. 26	Knob No. [illegible]	Adjusting Frog No. 31	Adjusting Lever No. 28 or 41	Mouth Piece No. [illegible]	Lever Adjustment No. [illegible]	Adjusting Screw No. [illegible]	Lateral Adjusting Lever No. 30	Adjusting Nut No. 40
09½	$1 30	$0 20	$0 [illegible]		$ [illegible]	$0 25	$0 [illegible]		$0 20	$0 20
09¾	1 30	20	15		10	25	20		20	20
015	1 30	20	15		.20	25	20		20	20
015½	1 30	20	15		.10	.25	20		20	20
016	1 20	30	15		10	.25	20		20	20
017	1 30	30	15		10	.25	20		20	20
018	1 20	40	15		10	.25	20		20	20
019	1 20	40	15		10	.25	20		20	20
060	1 10	30	20	$ 20		.25	20	$0 20		
065	1 30	30	20	20		.25	20	20		
060½	1 10	20	20	20		25	20	20		
065½	1 30	30	20	20		.25	20	20		
0100	15	05				...				
0101	15	05								
0102	30	30								
0103	45	20			10					
0110	50	20	20							
0120	60	20	20		10					
0130	60	20	20							
0140	30	30	20		10					
0220	60	30	20	20				20		

CIRCULAR PLANES

For Plane No.	Bottom	Frog Complete	Clamp	Handle	Top Casting	Adjusting Nut	Frog Screw Per Dozen	Clamp Screw Per Dozen
020	$0.65	$0.40	$0.25	.....	$1.60	$0.08	$0.40	$0.40
0113	.65	.40	.25	$0.15	1.10	.08	.40	.40

*Not carried in stock.

IRON RABBET PLANES

For Plane No.	Bottom	Clamp	Depth Gauge	Fence	Spurs and Screws Per Dozen
0180	$0.75	$0.10	$0.20	.....	$0.60
0181	.75	.10	.20	.....	.60
0182	.75	.10	.20	.....	.60
0190	.90	.10	.20	.....	.60
0191	.90	.10	.20	.....	.60
0192	.90	.10	.20	.....	.60
078	1.00	.10	.20	$0.25	.60

WOOD BENCH PLANES

Ohio Tool Co.'s

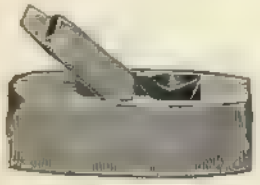
Unless otherwise stated these planes are made of Beechwood in two grades of lumber, viz: Ohio or first grade, Scioto or second grade

Exactly the same grade of plane iron is used in both Scioto and Ohio planes. The steel in all of the irons or bits, which are fully warranted, is of a superior quality and great care is exercised in the making and tempering.

Extras. Wood bench planes with irons wider than regular: single, 10 cents; double, 15 cents per ⅛-inch extra (list).

In ordering, be sure to state the grade and the sizes or assortment wanted.

SMOOTH PLANES



No. 3

No. 5

Improved Handle for Right Hand

No. 5¼

Round Handle

Sizes regularly made, 2 to 2¼-inch irons

No. 1. Single iron, polished start, each.. ..... $0.70
No. 2. Single iron, polished iron start, each 80
No. 3. Double iron, polished start, each 90
No. 4. Double iron, polished iron start, each 1 00
No. 5. Double iron, special solid handle for right hand, each 1.75
No. 5¼. Double iron, round solid handle, each..... $1.75
No. 5½. Double iron, pad handle, each 1 50
No. 6. Double iron and adjustable mouth, each 1 65
No. 7. Double iron, adjustable mouth, solid handle, each 2.70
No. 11¼. Double iron, 1⅝ inch carriage, each..... .90

JACK PLANES

No. 15

No. 17

Sizes regularly made, 2 to 2¼-inch irons

No. 12. Single iron, polished start, each.....$0 85
No. 13. Single iron, polished iron start, bolted handle, each 1.10
No. 14. Single iron, polished start, razee, each..... 1.10
No. 15. Double iron, polished start, each $1 00
No. 16. Double iron, polished iron start, bolted handle, each 1 25
No. 17. Double iron, polished start, razee each 1 20

FORE PLANES—22-INCH

No. 21

No. 23

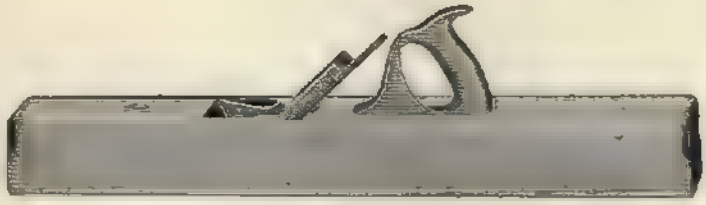
Sizes regularly made, 2⅜ to 2⅝ inch irons

No. 18. Single iron, polished start, each $1 40
No. 19. Single iron, polished iron start, bolted handle, each 1 70
No. 20. Single iron, polished start, razee, each 1 70
No. 21. Double iron, polished start, each $1.70
No. 22. Double iron, polished iron start, bolted handle, each 2 30
No. 23. Double iron, polished start, razee each 1 90

WOOD BENCH PLANES

Ohio Tool Co.'s

JOINTER PLANES



No. 27

No. 29

Sizes regularly made, 2½ to 2[illegible] inch irons. Specify length wanted

		Length, inches	26	28	30
No. 24.	Single iron, polished start	each,	$1.50	$1.60	$1.80
No. 25.	Single iron, polished iron start, bolted handle	each,	1.95	2.05	2.25
No. 26.	Single iron, polished start, razee	each,	1.80	1.90	2.10
No. 27.	Double iron, polished start	each,	1.80	1.90	2.15
No. 28.	Double iron, polished iron start, bolted handle	each,	2.60	2.75	2.95
No. 29.	Double iron, polished start, razee	each,	2.05	2.15	2.40
No. 29¾.	Tank jointers, made to order, and prices named upon application.				

*BENCH PLANES, WITHOUT IRONS

No. 11Z.	Smooth, single or double, each	$0.60
No. 17Z.	Jack, single or double, each	.70
No. 23Z.	Fore, single or double, each	1.30
No. 29Z.	Jointer, single or double, 26 in., each	1.40
No. 29Z.	Jointer, single or double, 28 in., each	1.50
No. 29Z.	Jointer, single or double, 30 in., each	1.70

*TOY PLANES

No. 2C

No. 14C

(Single Iron, 1½-inch)

No. 2C.	Smooth, each	$0.65
No. 14C.	Jack, each	.75

Toy Planes with double irons to order. Prices on application

*SHIP PLANES, DOUBLE IRON

No. 17S

No. 11S.	Smooth, polished start, each	$1.00
No. 17S.	Jack, razee, polished start, each	1.20
No. 23S.	Fore, razee, polished start, each	1.90
No. 29S.	Jointer, 26 in., razee, polished start, each	2.10

Ship hollows and rounds, hawk and oar planes to order. Prices quoted on application.

*Not carried in stock.

*GERMAN PATTERN PLANES

No. 11G

No. 17G

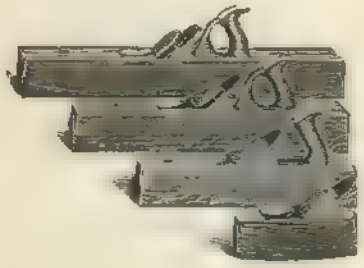
No. 2G.	Smooth, single iron, with horn, each	$1.20
No. 14G.	Jack, single iron, with horn and handle, each	1.40
No. 11G.	Smooth, double iron, with horn, each	1.25
No. 17G.	Jack, double iron, with horn and handle, each	1.45

These are furnished with either square or round end irons. Square end irons sent unless otherwise ordered.

*WOOD BENCH PLANES

Ohio Tool Co.'s

PREMIUM BENCH PLANES



Selected Timber, with Polished Start

Single Iron

No. 1½.	Smooth, each	$0 90
No. 12½.	Jack, each	1 00
No. 18½.	Fore, each	1 55
No. 24½.	Jointer, 26 in., each	1 70
No. 24½.	Jointer, 28 in., each	1 80
No. 24½.	Jointer, 30 in., each	2 10

Double Iron

No. 3½.	Smooth, each	$1 00
No. 15½.	Jack, each	1.10
No. 21½.	Fore, each	1.90
No. 27½.	Jointer, 26 in. each	2 05
No. 27½.	Jointer, 28 in. each	2.15
No. 27½.	Jointer, 30 in., each	2.35

EUREKA BENCH PLANES

With Double Irons Brass Nutted, Sharpened, Ready for Use

Carefully Made from Selected Timber

No. 702

Iron, with Brass Nut, in Eureka Planes

Specify Size of Iron Wanted

No. 700.	Smooth, 2 to 2¼ in. iron, each	$0 90
No. 702.	Jack, 16 in., 2 to 2¼ in. iron, each	1.00
No. 704.	Fore, 22 in., 2⅜ to 2⅝ in. iron, each	1.70
No. 706.	Jointer, 26 in., 2½ to 2¾ in. iron, each	1.80
No. 708.	Jointer, 28 in., 2½ to 2¾ in. iron, each	1.90
No. 710.	Jointer, 30 in., 2½ to 2¾ in. iron, each	2 15

No. A DOUBLE EXTRA PLANES

Polished; with Polished Start; Selected Timber

Single Iron

No. 2¼.	Smooth, each	$1.35
No. 13¼.	Jack, bolted handle, each	1.60
No. 19¼.	Fore, bolted handle, each	2.00
No. 26¼.	Jointer, 26 in., bolted handle, each	2 35

Double Iron

No. 4½.	Smooth, each	$1.50
No. 16¼.	Jack, bolted handle each	1.85
No. 22½.	Fore, bolted handle, each	2.25
No. 28½.	Jointer, 26 in., bolted handle, each	2.60

APPLEWOOD BENCH PLANES

Finely Made, with Polished Starts

Single Iron

No. 2¾.	Smooth, each	$1.30
No. 14½.	Jack, each	1.50
No. 20½.	Fore, each	2.10
No. 24¾.	Jointer, 26 in., each	2.60

Double Iron

No. 7¼.	Smooth, each	$1.50
No. 7½.	Smooth, solid handle, each	2.25
No. 17¼.	Jack, each	1.75
No. 23¼.	Fore, each	2.40
No. 29¼.	Jointer, 26 in., each	3.25

BOXWOOD AND ROSEWOOD BENCH PLANES

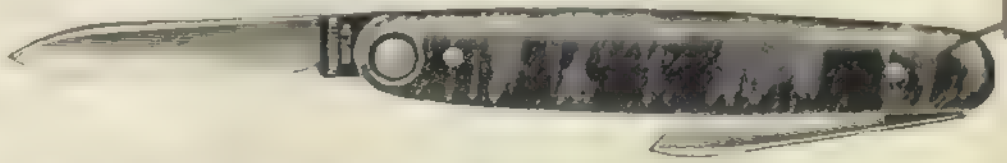
Double Iron

No. 8.	Smooth, boxwood	each, $2.50
No. 9.	Smooth, rosewood	each, 2.50
No. 10.	Smooth, boxwood, solid handle	each, 5.00
No. 11.	Smooth, rosewood, solid handle	each, 5.00

*Not carried in stock. Prices on Jack, Fore and Jointer Planes quoted on application.

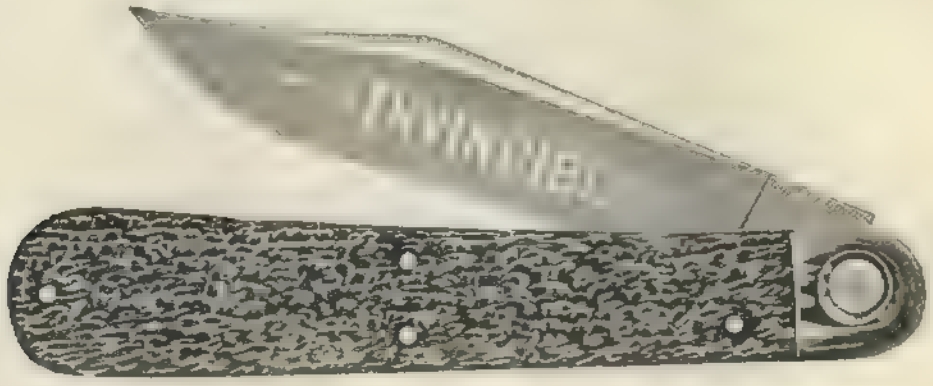
PRESS BUTTON POCKET KNIVES

No. 100. Two blades, full polished, stag handle, brass lined, 3¾ in. .....per dozen, $14.00

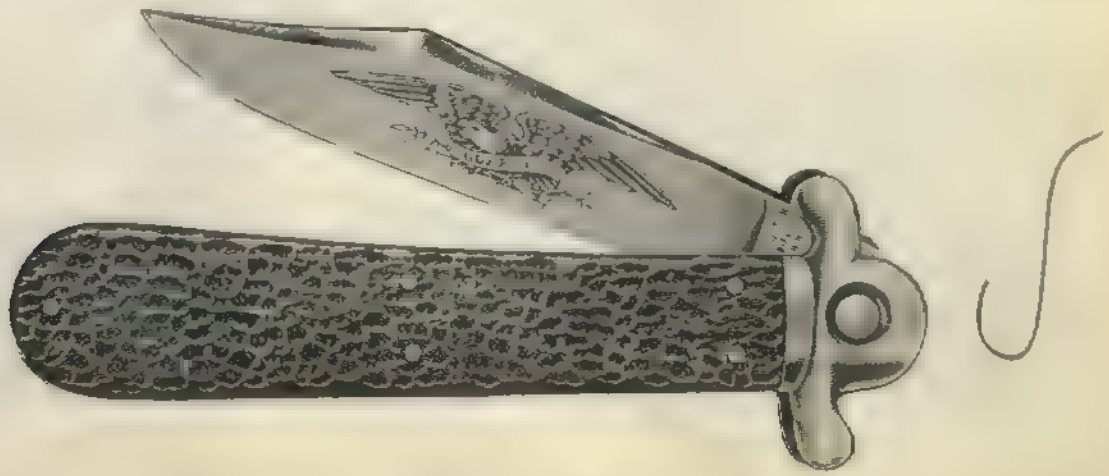


No. 102. Two blades, full polished, imitation shell handle, brass lined, 3¼ in.....per dozen, $15.00

No. 103. Two blades, full polished, white handle brass lined, 3¼ in.....per dozen, $15.00



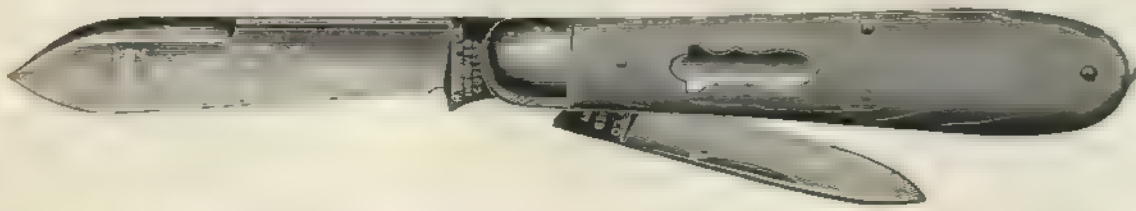
No. 1000. One blade, polished, stag handle, steel lined, 4⅞ in.....per dozen, $16.00



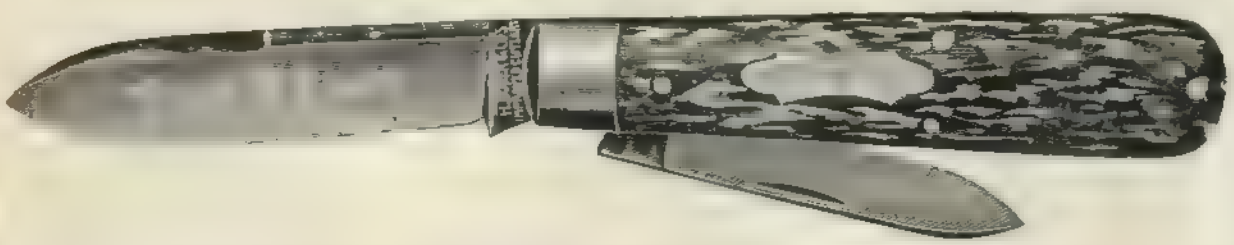
No. 1010. One blade, polished, stag handle, steel lined, stationary guard 4⅞ in.....per dozen, $18.00

TREE BRAND POCKET KNIVES

No. 9676GB. Two blades, gray bone handle, brass lining, German silver bolster, half polished finish ..... per dozen, $8.00

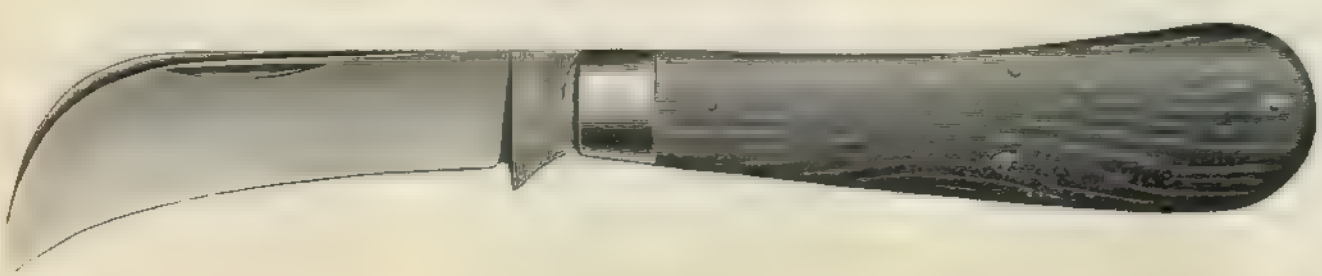


No. 9949. Two blades, cocoa handle, brass lining, German silver bolster, half polished finish.....per dozen, $8.00



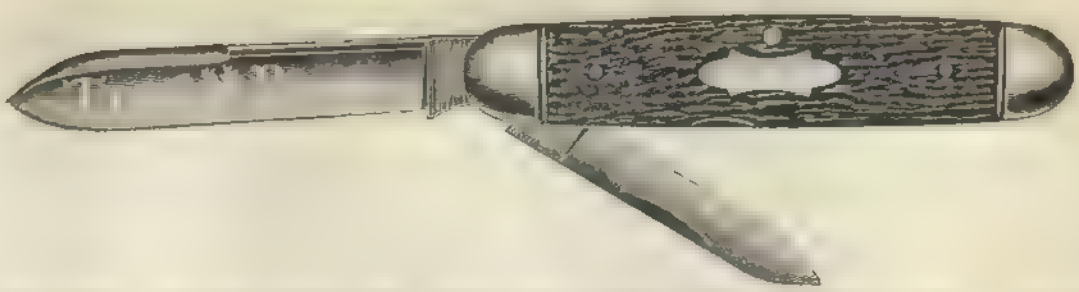
No. 9715. Two blades, stag handle, brass lining, steel bolster, glazed finish .....per dozen, $8 00

No. 9716. Two blades, stag handle, brass lining, steel bolster, glazed finish .....per dozen, $8 00

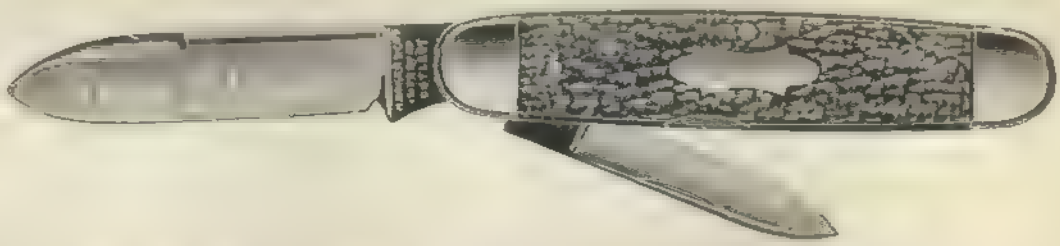


No. 9215. Pruning knife, one blade, rosewood handle, steel lining, steel bolster, glazed finish.....per dozen, $8 00

TREE BRAND POCKET KNIVES



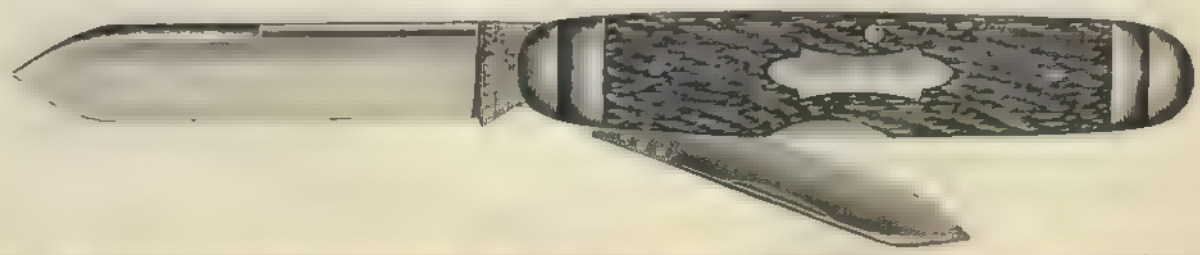
No. 9817. Two blades, stag handle, brass lining, German silver bolster and cap, half polished finish ..... per dozen, $8.00



No. 9308. Two blades, stag handle, brass lining, German silver bolster and cap, half polished finish.....per dozen, $8.50

No. 9980. Two blades, stag handle, brass lining, steel bolster and cap, half polished finish ..... per dozen, $8.50

No. 9877. Two blades, stag handle, brass lining, steel bolster and cap, half polished finish ..... per dozen, $8.50



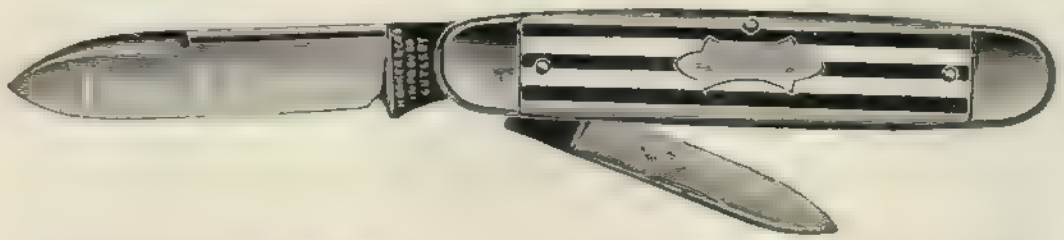
No. 9879. Two blades, stag handle, brass lining, steel bolster and cap, half polished finish ..... per dozen, $8.50

TREE BRAND POCKET KNIVES

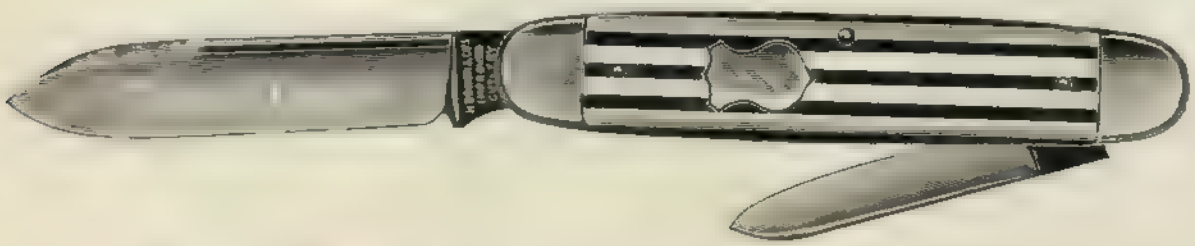
No. 9330. Two blades, small blade punch blade, stag handle, brass lining, German silver bolster and cap, half polished finish . . . . . per dozen $8 00

No. 9301. Two blades stag handle brass lining, flat German silver bolster and cap, half polished finish per dozen $10 50

No. 9984. Two blades stag handle brass lining, flat German silver bolster and cap, half polished finish per dozen $12 00



No. 9308BW. Two blades, black and white handle, brass lining, German silver bolster and cap, half polished finish . . . . . per dozen $9 00



No. 9334. Two blades, red and black handle, brass lining, flat German silver bolster and cap, half polished finish, ... per dozen, $12 00

TREE BRAND POCKET KNIVES

No. 6318. Physicians Knife, two blades, stag handle, brass lining, German silver bolster and cap, crocus finish.....per dozen, $12 00

No. 9340. Two blades, white handle, brass lining, nickel w[illegible]ster, half polished, tryst[illegible] per dozen $10 00

No. 9314. Two blades, silver oxidized handle, German silver lining, half polished finish.....per dozen, $8.00

No. 5942. Two blades, stag handle, brass lining, German silver bolsters, crocus finish ....per dozen, $10 00

No. 7090. Two blades, stag handle, brass lining, German silver bolsters, nickel[illegible] crocus finish ..per dozen, $8 [illegible]

No. 6197GB. Two blades, gray Buffalo handle, brass lining, crocus finish ... .per dozen, $8 50

TREE BRAND POCKET KNIVES

No. 7083. Two blades, stag handle, brass lining, German silve bolsters, glazed finish.....per dozen, $8 50

No. 6318. Two blades, stag handle, brass lining, German silver bolsters, crocus finish.....per dozen, $8 50

No. 6318W. Two blades, white bone handle, brass lining, German silver bolsters, crocus finish.....per dozen, $8.50

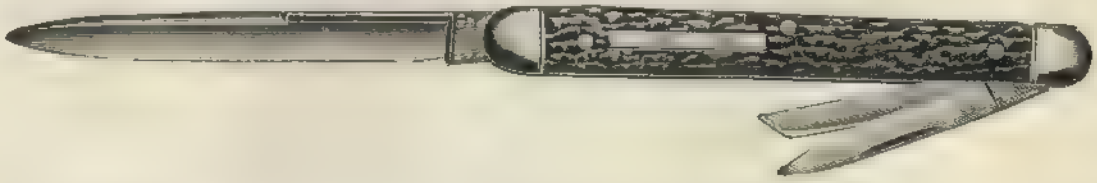
No. 6312. Two blades, stag handle, brass lining, German silver bolsters, crocus finish.....per dozen, $12.00

No. 6278. Two blades, stag handle, brass lining, German silver bolsters, glazed finish.....per dozen, $1..00

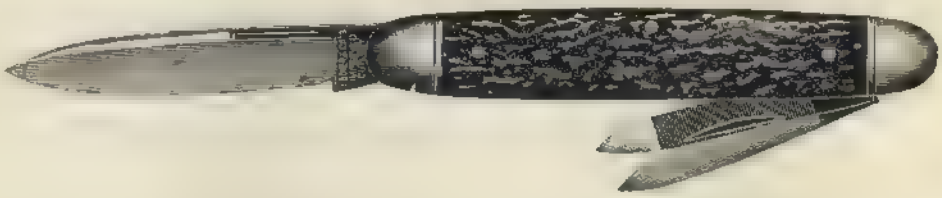
No. 6891. Two blades, stag handle, brass lined, German silver bolsters and shield, crocus finish.....per dozen, $12 00

TREE BRAND POCKET KNIVES

No. 6783. Two blades, stag handle, brass lining, German silver bolsters and shield, crocus finish ..per dozen, $12.00

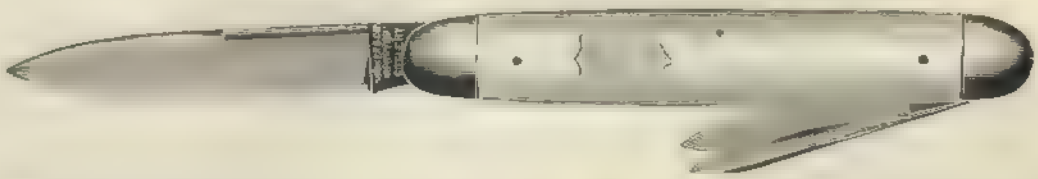


No. 6111S. Three blades, stag handle, brass lining, German silver bolsters and shield, crocus finish .....per dozen, $18.00

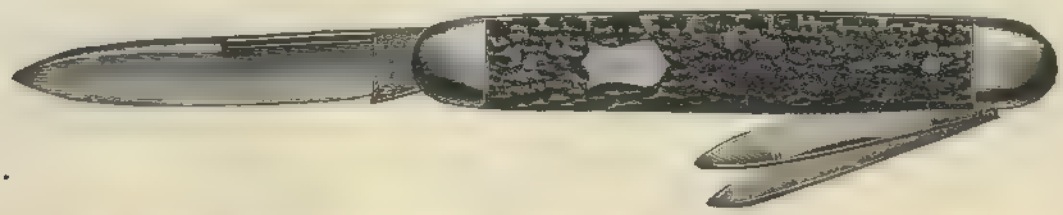


No. 6782. Two blades and file, stag handle, brass lining, German silver bolsters, glazed finish.....per dozen, $12.00

No. 5801. Three blades, gray Buffalo handle, brass lining, German silver bolsters and shield, crocus finish per dozen, $15.00



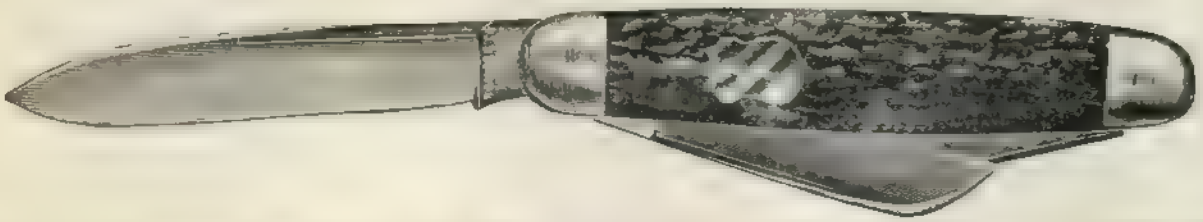
No. 5695. Three blades, white bone handle, brass lining, German silver bolsters and shield, crocus finish per dozen, $15.00



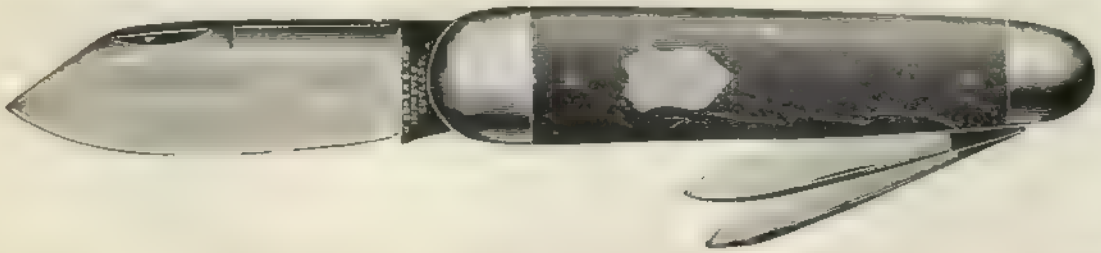
No. 6626. Two blades and file, stag handle, brass lining, German silver bolsters and shield, crocus finish per dozen, $15.00

TREE BRAND POCKET KNIVES

No. 6976. Three Blades, stag handle, brass lining, German silver bolsters and shield, [illegible] finish . . per dozen $16 00



No. 6433. Three Blades, stag handle, brass lining, German silver bolsters and shield, [illegible] finish [illegible] per dozen, $18 00

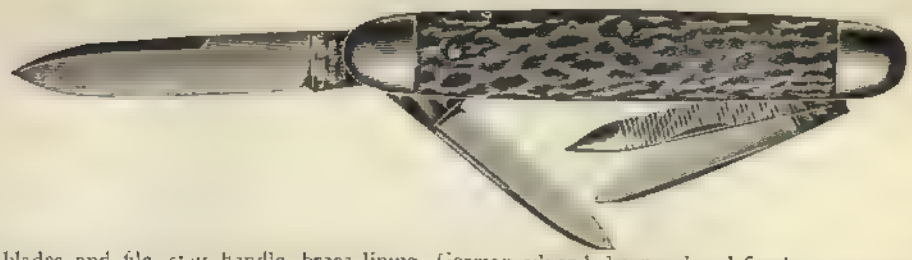


No. 6720. Three blades, cocoa handle, brass lining, German silver bolsters and shield, glazed finish per dozen $18 00

No. 9915. Three blades, spear, spey and pen, stag handle, brass lining, German silver bolsters and shield, all polished, . . per dozen $16 00

No. 6297. Three blades and file, stag handle, brass lining, German silver bolsters and shield, [illegible] finish [illegible] per dozen $17 00

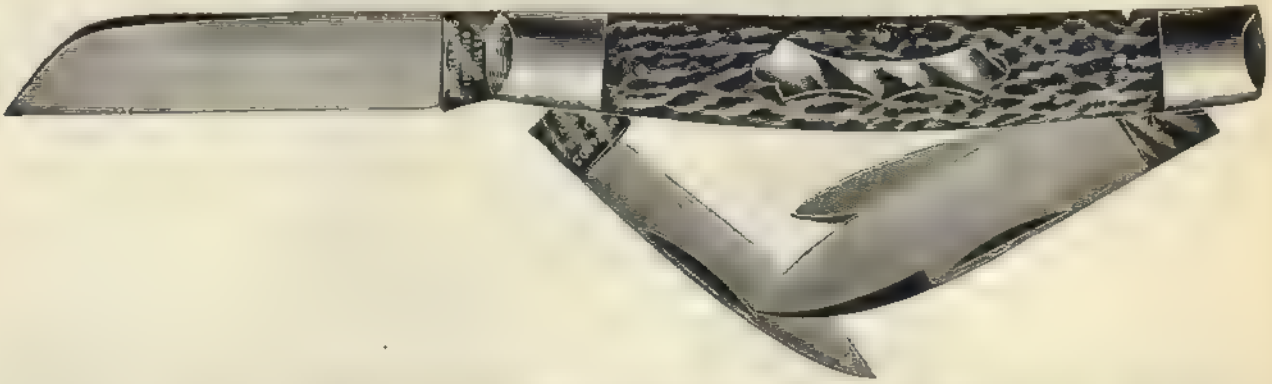
TREE BRAND POCKET KNIVES



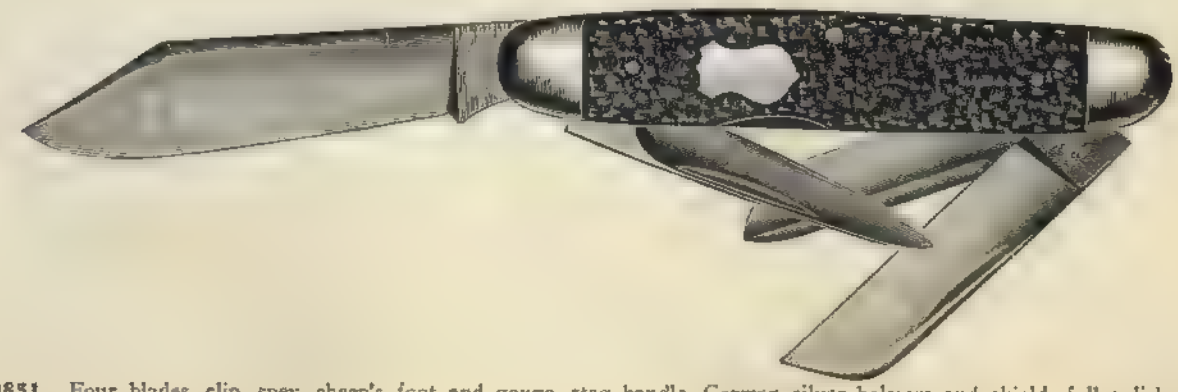
No. 6762. Three blades and file, stag handle brass lining, German silver bolsters, glazed finish . . . . . .per dozen, $12.00

No. 6457. Three blades and file stag handle, German silver bolsters glazed finish.... . . . . per dozen $15 00

No. 6007. Four blades, stag handle, brass lining, German silver bolsters and shield, crocus finish..... per dozen, $18 00

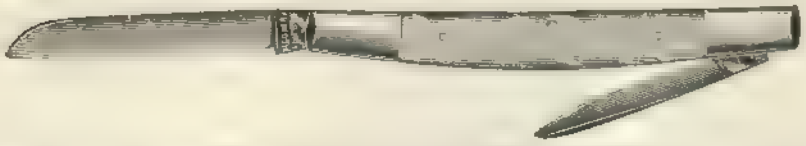


No. 5974. Four blades, stag handle, brass lining German silver bolsters and shield, crocus finish . . . . .per dozen, $20 00



No. 9851. Four blades, clip, spey, sheep's foot and gouge, stag handle, German silver bolsters and shield, full polished .. ..per dozen, $18 00

TREE BRAND POCKET KNIVES



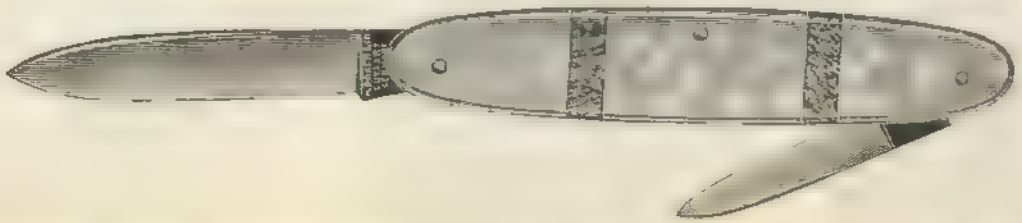
No. 6596. Two blades, pearl handle, brass lining, German silver bolsters, crocus finish ..... per dozen, $10.00

No. 6595. Two blades, pearl handle, brass lining, German silver bolsters, crocus finish.. ..... per dozen, $10.00

No. 6775. Two blades, pearl handle, brass lining, crocus finish ..... per dozen, $20.00

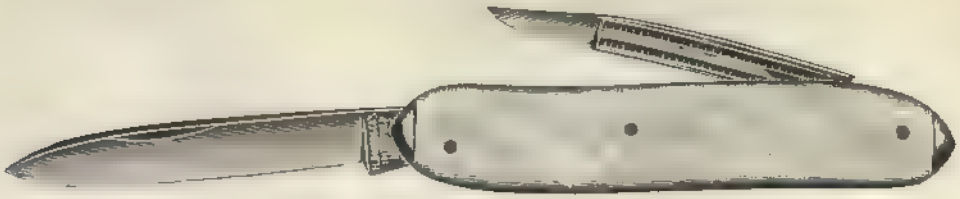
No. 7253. Two blades, pearl handle, brass lining, German silver bolsters and shield, glazed finish ..... per dozen, $16.00

No. 7092. Two blades, pearl handle, brass lining, German silver bolsters and shield, crocus finish ..... per dozen, $20.00



No. 7256. Two blades, Oriental pearl and German silver handle, brass lining, crocus finish ..... per dozen, $30.00

TREE BRAND POCKET KNIVES



No. 6900. One blade and file, pearl handle, brass lining, German silver tips and shield, crocus finish . . . per dozen, $36 00

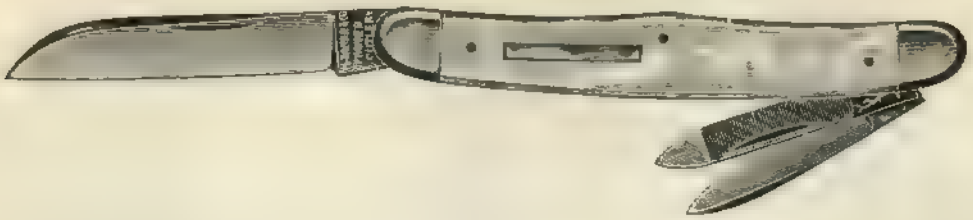
No. 6771. Two blades and file, pearl handle, brass lining, German silver tips and shield, crocus finish . . . per dozen, $36 00

No. 5958. Two blades and file, pearl handle, brass lining, German silver blisters and shield, crocus finish . . . per dozen, $36 00

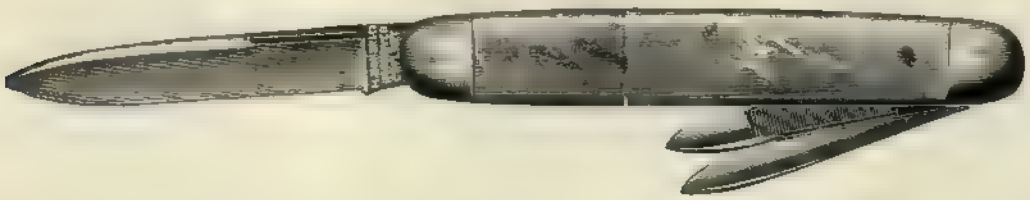
No. 6761. Two blades and file, pearl handle, brass lining, German silver blisters, glazed finish . . . per dozen, $2 00

No. 6972. Two blades and file, pearl handle, brass lining, German silver bolsters and shield, crocus finish . . . per dozen, $26 00

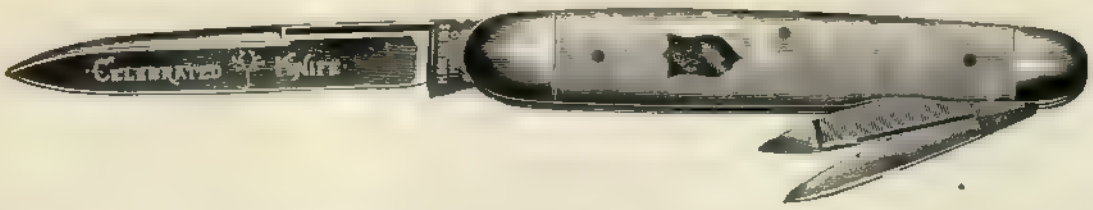
TREE BRAND POCKET KNIVES



No. 6330. Two blades and file, pearl handle, brass lining, German silver bolsters and shield, crocus finish ..per dozen, $26.00

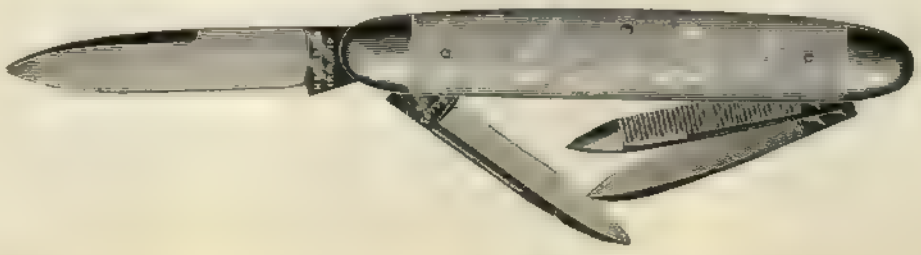


No. 6380. Two blades and file, pearl handle brass lining, German silver bolsters, glazed finish .. . .. per dozen $24.00



No. 6379. Two blades and file, pearl handle, brass lined, German silver bolsters and shield crocus finish ..per dozen, $26.00

No. 6356. Three blades and file, pearl handle brass lining, German silver bolsters and shield, crocus finish ..per dozen, $26.00



No. 6781. Three blades and file, pearl handle, brass lining German silver bolsters, glazed finish per dozen, $21.00

TREE BRAND POCKET KNIVES

No. 6381. Three blades and file, pearl handle, brass lining, German silver bolsters, glazed finish . per dozen, $24 00

No. 5612. Three blades and file, pearl handle, brass lining, German silver tips and shield, crocus finish . per dozen, $36 00

No. 6848. Three blades and file, pearl handle, brass lining, German silver bolsters and band, glazed finish per dozen, $21 00

OFFICE KNIVES

No. 6608. Two blades, celluloid handle, brass lining, crocus finish per dozen, $13.00

CORN KNIVES

No. 6697. Corn Knife, one blade, celluloid handle, brass lining, crocus finish .....per dozen, $12.00

TREE BRAND POCKET KNIVES

No. 7269. Two blades and scissors, white metal silver plated handle, crocus finish ..... per dozen, $21.00

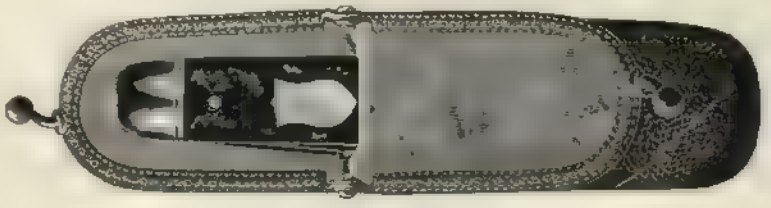
No. 7299. One [illegible] cap lifter and cork screw, stag handle, German silver [illegible]ster and shield [illegible] mid

..... per dozen, $24.00

POCKET KNIFE PURSES

Button

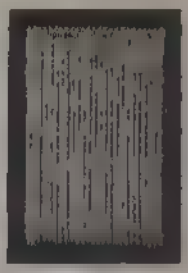
Button Pocket Knife Purses, kid leather, assorted sizes.....per dozen, $1.20



Clasp

Clasp Pocket Knife Cases, kid leather, assorted sizes.....per dozen, $1.20

NEEDLES



SMITH HARNESS

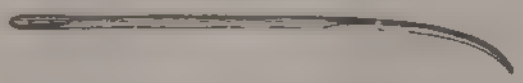
No. 64—Round Eye

Size Nos.	000	00	0	1	2	3	4	5	7	8
Per Paper	$0.20	.20	.20	.16	.16	.16	.16	.16	.16	.16

No. 66—Egg Eye

Size Nos.	000	00	0	1	2	3	4	5	7	8
Per Paper	$0.20	.20	.20	.20	.16	.16	.16	.16	.16	.16

Twenty-five in a Paper



NICHOLS COLLAR NEEDLES

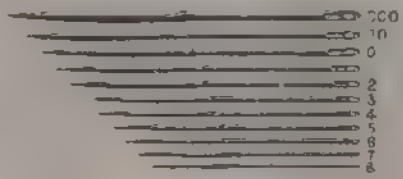
No. 72—Half Curve

Length, In.	3	3½	4	5	6	6½
Per Dozen	$0.84	1.00	1.30	1.60	1.80	2.20

Full Curve — Per Dozen

No. 74—3 in. Long before Bent $0 94
No. 76—4 in. Long before Bent 1.36

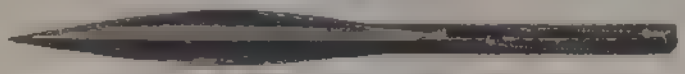
One Dozen in a Package



No. 78—SMITH GLOVERS'; for Leather and Buckskin

Size Nos.	000	00	0	1	2	3	4	5	6	7
Per Paper	$0.30	.30	.30	.30	.30	.30	.30	.30	.30	.30

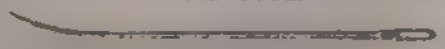
Twenty-five in a Paper



KIRBY SPRING EYE with Cutter

Length, In.	4	4½	5	5½
Per Dozen	$2 84	2 84	2 84	2 84

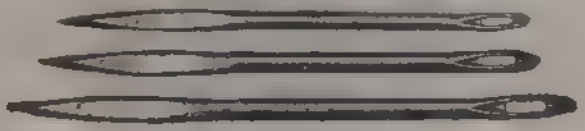
One Dozen in a Box



No. 20—GERMAN BENT

Length, In.	3	3½	4	4½	5	5½	6	8
Per Gross	$1.68	1.79	1.90	2.11	2.63	2.84	3.16	3.70

Three Dozen in a Package



SAIL, BEST QUALITY

For Sail or Tent Making and Canvas Work

No. 80—Jas. Smith, Size Nos. are English Wire Gauge

Size Nos.	17	17½	16	16½	15	15½	14	14½	13	12
Length, In.	2¼	2⅜	2⅜	2½	2⅝	2¾	2⅞	3	3¼	3⅜
Per Paper of 25,	$0.50	.50	.50	.50	.50	.50	.60	.60	.70	1.00

No. 80C—COMMON, BLUED STEEL SAIL OR PACKING

Size Nos.	5	6	7
Length, In.	2¼	2¼	2
Wire Gauge	14½	14	13¼
Per 100	$1.47	1.58	2.63

Twenty-five in a Paper

HARNESS MACHINE NEEDLES

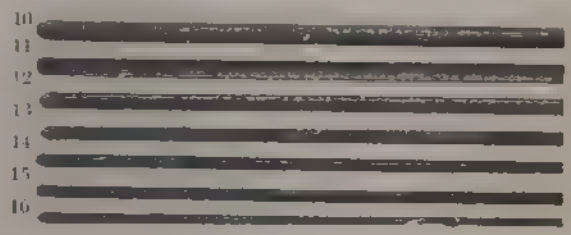
For Wax Thread Lock Stitch Machine, Finest Steel, Extra Temper, Warranted

No. 68—For Landis Machine

No. 70—For Pearson Machine

Size Nos.	2	3	4	5	6	7
Per Dozen	$2.00	2.00	2.00	2.00	2.00	2.00

One Dozen in a Package



KNITTING NEEDLES

Length 8 in.

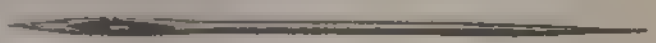
Size Nos.	10	11	12	13	14	15	16
Per Gross	$1.90	1.47	1.16	.95	.88	.84	.76

Three Dozen in a Package

JAMES STRAIGHT

Length, In.	3½	4	4½	5	5½	6
Per Gross	$2 11	2.63	3.70	4.21	5.26	6.00

Three Dozen in a Box



UPHOLSTERERS' OR MATTRESS, DOUBLE POINTED

	Per Dozen
Length 12 in	$1 68
Length 14 in	1.90

Three Dozen in a Package

SAILORS' PALMS

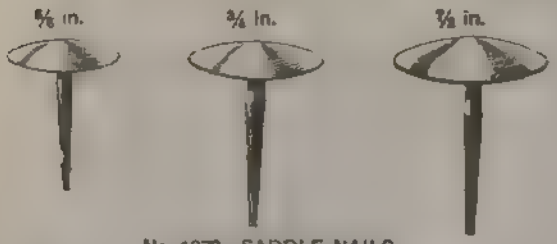
Per Dozen

No. 82—Used in Sewing Canvas and other Heavy Material, Extra Strong Stitched; Raw Hide Thimble $4 00

One in a Package; Weight 1½ Lbs. per Dozen

For Sewing and Saddlers' Awls see Tool Dept.

SADDLERY NAILS



No. 1878—SADDLE NAILS

Extra Heavy Metal, Oval Head, XC Plate; Spun Back

Diam. Head, In.	5/8	3/4	7/8
Length Nail	7/8	1	1 1/8
Weight Gross, Lbs.	1	1 1/4	1 1/2
Per Gross	$0.70	.80	.94

5/8 in., One Gross; Balance Half Gross in a Box

LINING NAILS, OVAL CAPPED

For Numbers and Prices see Tool Dept. Page

Ounces	3	4	6	8	10	12
Length, In.	3/8	7/16	1/2	9/16	5/8	11/16
Weight Package, Lbs.	1 1/2	1 3/4	2 3/4	3 1/2	4 1/2	5

75 in a Paper; Twenty Papers in a Package

SADDLERY TACKS

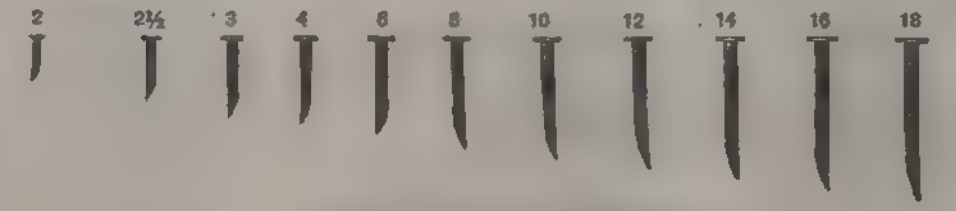
"In Half Weight Papers" signifies that there are Half as many Ounces of Tacks in the Paper as it is named, for example, there is One Ounce of Tacks in the 2 Oz. Length, Four Ounces of the 8 Oz., and 1 1/2 Lb. of Tacks in a Half Weight Paper of 16 Oz.

CUT TACKS, SWEDES IRON, BLUED

In Half Weight Papers

Ounces	2	2 1/2	3	4	6	8	10	12	14	16	18	20	22	24
Length, In.	1/4	5/16	3/8	7/16	1/2	9/16	5/8	11/16	3/4	13/16	7/8	15/16	1	1 1/16
Wt. Doz. Papers, Lbs.	3/4	1	1 1/8	1 1/2	2 1/4	3	3 3/4	4 1/2	5 1/4	6	6 3/4	7 1/2	8 1/4	9
Per Dozen Papers	$0.68	.72	.80	.92	1.16	1.40	1.64	1.90	2.16	2.40	2.80	2.88	3.10	3.40

One Dozen Papers in a Package



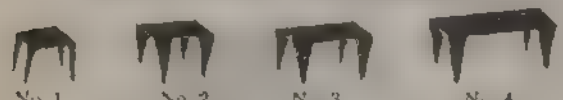
LACE TACKS, SWEDES IRON, BLUED

In Half Weight Papers

Ounces	2	2 1/2	3	4	6	8	10	12	14	16	18	20
Length, In.	1/4	5/16	3/8	7/16	1/2	9/16	5/8	11/16	3/4	13/16	7/8	1
Weight Dozen Papers, Lbs.	3/4	1	1 1/8	1 1/2	2 1/4	3	3 3/4	4 1/4	5 1/4	6	6 1/2	8
Per Dozen Papers	$1.00	1.10	1.20	1.30	1.40	1.50	1.80	2.20	2.50	2.60	3.00	3.50

One Dozen Papers in a Package

SLIDE LOOP FASTENERS



Black Japanned

Made of Sheet Steel, Stiff yet may be Clinched without Breaking; Finish will not chip off in driving

Nos.	1	2	3	4
Size, In.	3/8x3/8	11/16x3/8	11/16x3/8	3/4x3/8
Length Prongs, In.	1/2	1/2	1/2	1/2
For Loops, In.	5/8	5/8	5/8	1
Weight Gross, Lbs.	1/2	1/2	3/4	1/2
Per Gross	$0.60	.70	.80	90

One Gross in a Neatly Labeled Box

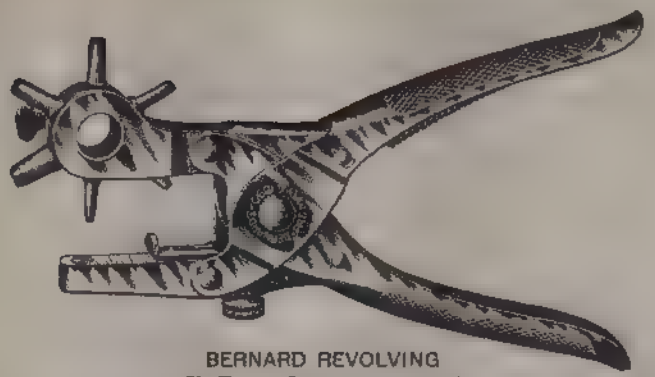
FOOT PRESSES

For Driving Slide Loop Fasteners

This Press is loaned with first order for not less than 40 Gross of Fasteners; They are never sold, and always remain the property of the Williamsport Staple Co.

Height 44 in., Ball Balance; Sensible Foot Pedal; Steel Mandrel; Adjustable Brass Stock, Brass Thumb Screw; Cast Iron Head and Frame; Weight 60 Lbs.

SADDLERS' PUNCHES



BERNARD REVOLVING

Six Tubes, Sizes 1, 2, 3 4, 5, 6 — Each

No. 60 Length 8 in Best Quality Steel, Nickel Plated, Open Throat, Parallel Jaws, Molded Handles, Tubes Screwed to the Hub, Adjustable Gauge enables user to punch the Holes at Uniform Distances, also used as a Belt Punch $2 50

One in a Box; Weight 13½ Lbs. per Dozen

No. 155—OSBORNE SIDE SPRING, REVOLVING

Length 9 in.; Polished Steel; Tubes Screw to Hub — Each

Four Tubes, Sizes 1, 2, 3, 4 ..... $2 30

Six Tubes, Sizes 1, 2, 3, 4, 5, 6 ..... 2 70

Half Dozen in a Box; Weight 11 Lbs. per Dozen

EXTRA TUBES — Each

For 155, Sizes 1 to 6 ..... $0 30

No. 153 OSBORNE SINGLE TUBE

Length 8½ in., Extra Quality Steel, Polished, Tubes to Screw — Each

With One Tube, Size 1, 2, 3, 4, 5, 6 7 or 8 ..... $1 40

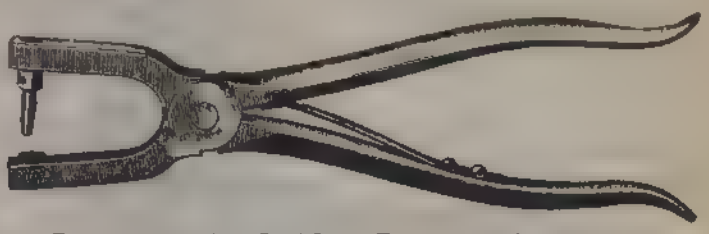
With One Tube Size 00 or 0 ..... 1 50

Half Dozen in a Box; Weight 9½ Lbs. per Dozen

EXTRA TUBES — Each

For No. 153; Sizes 1 to 8 ..... $0 32

For No. 153; Sizes 00 or 0 56



Length 9 in., made of Semi-Steel Castings, with Improved, Easy Working Joints, Tubes are made from Solid Stock, Tempered by Hand; Highly Tempered Steel Spring

SPRING, REVOLVING

Has Four Tubes, Assorted, Sizes 4, 6, 8 and 10. Turrets made from Solid Steel Rod — Per Dozen

No. 354—Polished $15.00

Half Dozen in a Box; Weight 10 Lbs. per Dozen

SPRING, SINGLE TUBE

Tubes are Easily Inserted or Removed — Per Dozen

No. 228—Polished, with 4 Tubes, Sizes 6, 7, 8 or 9, Assorted in a Box $5 00

One Dozen in a Box; Weight 8½ Lbs. per Dozen

EXTRA TUBES FOR ABOVE PUNCHES, Solid Stock, Tempered by Hand, Straw Color Finish; to Drive

Per Dozen

No. 360—For Revolving Punch, Assorted Sizes 4, 6, 8 and 10 ..... $1.50

Per Dozen

No. 220—For Spring Punch, Assorted Sizes, 3, 4, 5, 6, 7, 8 and 9 ..... $1 50

No. 158—OVAL PUNCHES

Length 3¾ in., Polished Steel, for Punching Holes for Trace Buckles, etc

Size Nos.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Size Hole, In.	1/32x1/32	1/32x1/32	1/32x1/16	1/32x1/32	1/32x1/8	1/16x1/16	1/32x1/32	1/32x1/32	1/32x1/32	1/32x1/32	3/64x1/16	1/16x1/4	1/16x3/16	1/32x3/16	1/32x3/16	1/16x1/16	3/64x1/8
Each	$0.70	.60	.60	.60	.60	.60	.60	.70	.70	.70	.70	.82	.82	.94	.94	.94	.94

One Dozen in a Box; Average Weight 1½ Lbs. per Dozen

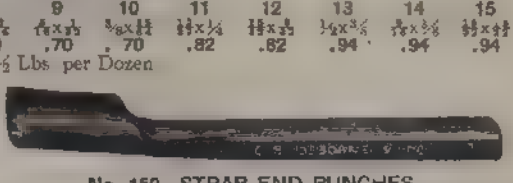
No. 147—ROUND PUNCHES

Length 3¾ in., Polished Steel, for Straight Punching

Size Nos.	0	1	2	3	4	5	6	7	8
Size, In.	1/32	1/16	3/32	1/8	5/32	3/16	7/32	1/4	5/16
Each	$0.50	.40	.40	.40	.40	.40	.40	.44	.44

Size Nos.	9	10	11	12	13	14	15	16
Size, In.	11/32	3/8	13/32	7/16	15/32	1/2	17/32	9/16
Each	$0.44	.44	.50	.50	.68	.68	.82	.82

One Dozen in a Box; Weight 1¾ Lbs. Dozen

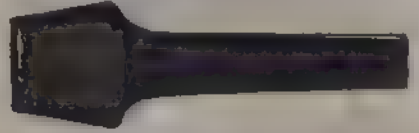


No. 150—STRAP END PUNCHES

Length 4½ in.; Polished Steel; for Rounding Ends of Straps

Size, In.	1/4	3/8	1/2	5/8	3/4	1	1 1/8	1 1/4	1 1/2
Each	$1 30	1.30	1.30	1.30	1 30	1 30	1 50	1.50	1.50

One Dozen in a Box; Average Weight 1¾ Lbs. per Dozen



No. 151—BAG OR BUCKLE PUNCHES

Length 5 in., Polished Steel, for Punching Buckle Holes

Size, In.	1/4	3/8	1/2	5/8	3/4	7/8	1	1 1/8	1 1/4	1 1/2
Each	$1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.80	1.80	1.80

Average Weight 5 Lbs. per Dozen — Half Dozen in a Box

No. 152—TRACE PUNCHES

Length 5 in.; Polished Steel; for Punching Holes in Ends of Traces

Size, In.	5/8	3/4	7/8	1	1 1/8	1 1/4	1 1/2
Each	$1.80	1 80	1.80	1.80	1.80	1.80	1.80

Average Weight 4 Lbs. per Dozen

OSBORNE PLIERS

BOLT NUT

Very Handy in Removing any sized Nut on Gig Saddles

	Each
No. 102½ Length 8 in., Polished Steel, Heavy Rivet	$2.00

Weight 5 Lbs. per Dozen

SADDLERS' PINCERS

For Pulling Leather into place and Tacking it down

	Each
No. 104 Length 8 in., Polished Steel Hardened Jaws	$2.80

Weight 15 Lbs. per Dozen

Half Dozen in a Box

PINCER PLIERS

Polished Steel

For Pulling Leather, Removing Brads, etc.; A Very Handy Tool for General Use

No. 99—HARNESS MAKERS'		
Length, In.	6	7
Weight per Dozen, Lbs.	6	6½
Each	$1.30	1.40

No. 98—SADDLERS'			
Length, In.	5	6	7
Weight per Dozen, Lbs.	5½	6	6½
Each	$0.76	.84	1.00

Half Dozen in a Box

PAD SCREW PLIERS

Length over all 6¼ in.; Forged Steel

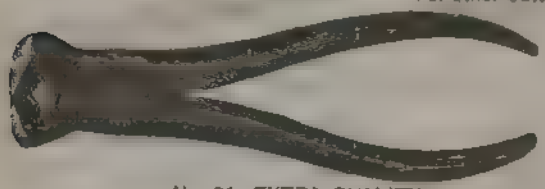
	Each
No. 102N Nickel Plated	$2.40
No. 102B Black Finished Handles	1.90

Open Stock, Weight 5 Lbs. per Dozen

OSBORNE CUTTING NIPPERS

Used not only by Harness Makers but by all classes of Mechanics, Farmers, etc., for Cutting Rivets, Wire, etc.

For other Cutting Nippers, see Tool Dept. Page

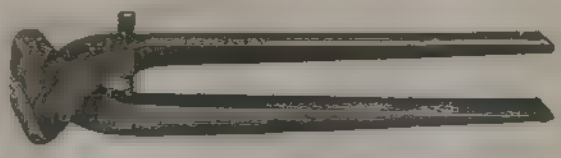


No. 94—EXTRA QUALITY

Steel Handles, Hardened Steel Jaws; Polished

Length, In.	5	6
Weight per Dozen, Lbs.	11	12
Each	$1.90	2.50

Half Dozen in a Box

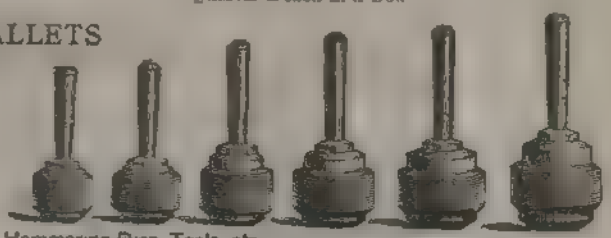


No. 96—EXTRA HEAVY, WITH STOP SCREW

Length, In.	7	8	9
Weight per Dozen, Lbs.	12	15	24
Each	$3.50	4.00	4.60

Quarter Dozen in a Box

OSBORNE MALLETS



For Pounding and Shaping the Leather, and Hammering Dies, Tools, etc.

No. 89—LIGNUM VITAE; Hickory Handle

Also Used by Carpenters, Tinners, etc.

Diam. of Face, In.	2½	3
Weight Each, Lbs.	1½	1¾
Each	$0.90	1.00

Open Stock

No. 165½—RAWHIDE

Hydraulic Pressed, Elastic and Durable Filled with Selected Stock

Size Nos.	0	1	2	3	4	5
Diam. Head, In.	3¼	3¼	3½	4	4½	4½
Weight each, Lbs.	2	3	4	6	8	10
Each	$3.00	3.40	4.10	4.50	5.00	5.70

Open Stock

LOOP STICKS

For Blocking up Leather Loops, Preparing them for the Strap

HICKORY

Smoothly Finished, Length 13 in.

Set No. 10S—Straight; Assorted Widths, ¾, ⅞, 1, 1⅛, 1¼, 1⅜ and 1½ in. ..... Per Set of Ten, $1.20

Set No. 10T—Taper; Assorted Widths, ¾, ⅞, 1, 1⅛, 1¼, 1⅜ and 1½ in. ..... Per Set of Ten, $3.00

One Set in a Bundle; Weight 1½ Lbs. per Set

IRON

Made to Exact Sizes; Highly Polished, 12 in. Long

No. 11S STRAIGHT

Size, In.	⅜	½	⅝	¾	⅞	1	1⅛	1¼	1⅜	1½	1⅝	1¾
Weight, Each	¼	¼	⅜	½	⅝	⅝	¾	⅞	1	1¼	1½	1¾
Each	$0.30	.38	.38	.46	.46	.60	.60	.76	.76	.84	.90	1.00

No. 11T TAPER

Size, In.	⅜	½	⅝	¾	⅞	1	1⅛	1¼	1⅜	1½	1⅝	1¾
Wt., Each	¼	¼	⅜	½	⅝	⅝	¾	⅞	1	1¼	1½	1¾
Each	$1.50	1.50	1.70	1.70	1.86	1.86	2.20	2.20	2.30	2.30	2.50	2.50

Open Stock

HARNESS MAKERS' AWLS

Also used in Lacing Belts, etc.

PLAIN AWLS

No. 1—Length 8½ in., Polished Steel; Octagon, Ebony Handle; Brass Ferrule ..... Each $0 80

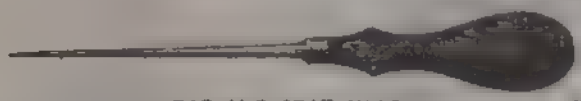
Weight 2 Lbs. per Dozen

SHOULDERED AWLS

No. 3—Length 8 in., Polished Steel, Rosewood Handle; Brass Ferrule. ..... Each $0 [illegible]

Weight 1½ Lbs. per Dozen

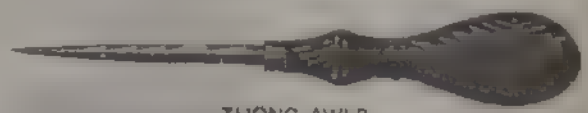
One Dozen in a Box



PAD AND SEAT AWLS

No. 2—Length 7¾ in., Polished Steel, Rosewood Handle; Brass Ferrule ..... Each $0.40

Weight 1½ Lbs. per Dozen



THONG AWLS

Length 7 in., Polished Steel; Rosewood Handle; Brass Ferrule; for Collar Work [illegible] in Belt Repairing

No 6R—Riveted Handle $0 60

No. 6 —Not Riveted 40

Weight 1½ Lbs. per Dozen

One Dozen in a Box

DRAWING AWLS

No 5 Length 9 in., Polished Steel, Rosewood Handle; Brass Ferrule, used with a Punch $0.60

Weight 1¾ Lbs. per Dozen

COLLAR AWLS

No 8 Length 10 in., Polished Steel, Rosewood Handle, Brass Ferrule, used without a Punch $0 60

Weight 1¾ Lbs. per Dozen

One Dozen in a Box

MEYERS LOCK STITCH

The Needle is Diamond Pointed and will cut through the thickest leather. It has a groove [illegible] end, running full length through the shank, overcoming [illegible] of cutting off the [illegible] when sewing heavy material. The [illegible] the waxed thread in convenient position under the [illegible] awnings, pulleys, belts, etc.

Per Dozen

No. 15—Complete with Spool of waxed Thread and one straight and curved Needle. $12 00

One in a Box; Weight ¼ Lb. Each

EXTRA NEEDLES

Per Dozen

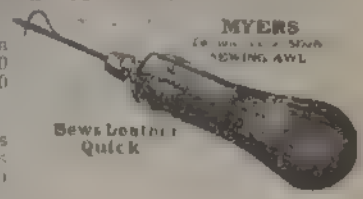
No. 16—Straight Needles... $1 20

No. 18—Curved Needles..... 1.20

EXTRA THREAD

Per Dozen Skeins

No 17—Waxed Thread, 25 [illegible] in Skein..... $2 00



HARNESS MAKERS' AWL HAFTS

For Awl Blades and other Awl Hafts, see Tool Dept.

PATENT

Length 5¾ in.; Round Handle, Socket will take any Size or Style of Awl

A Small Iron Wrench is Included

Per Dozen

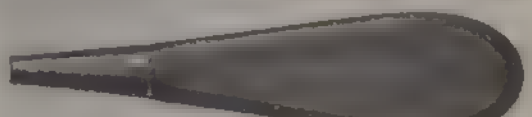
No. 146R—Rosewood; Riveted..... $9 00

No. 146 —Rosewood; not Riveted 7 50

No. 146C—Common White Wood 3 60

One Dozen in a Box

Weight 2 Lbs. per Dozen



COMMON

Length 4 in., Flat, Plain Edges Brass Ferrule Each [illegible]

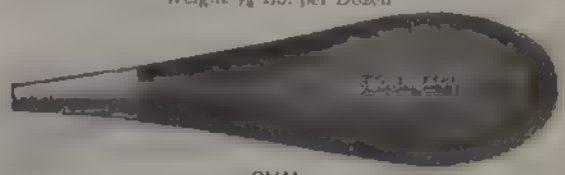
No. 140D—Ebony Drilled Through $1 [illegible]

No. 140 —Ebony [illegible]

No. 140½—Imitation Ebony ..... [illegible]

Half Gross in a Box

Weight ¾ Lb. per Dozen



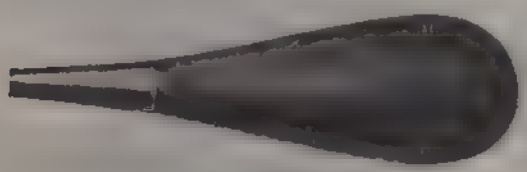
OVAL

Length 4 in., Brass Ferrule Per Dozen

No. 141½R—Rosewood $1 90

No. 141½B Black Wood 1 10

Weight ¾ Lb. per Dozen



TAPER FERRULE

Length 4 in., Brass Ferrule Each [illegible]

No. 141R—Rosewood $1 30

No. 141B Black Wood..... [illegible]

No. 141 —Yellow Wood 32

Weight ¾ Lb. per Dozen

Half Gross in a Box

COLLAR PALMS

For Pushing the Needle through the Work Each

No. 93—Length 4½ in., Diam 1¾ in., Polished Iron. $0 [illegible]

One Dozen in a Box; Weight ¼ Lb. Each

EDGE TRIMMING TOOLS

For Cutting away the Raw Edges of New Strap Work

By Light or Heavy Pressure the Width of Cut can be regulated from $\frac{1}{32}$ to $\frac{1}{16}$ in.

ROUND EDGE

Length 6 in., Polished Steel, Rosewood Handle; Brass Ferrule

	Each
No. 127 —Osborne	$1 50
No. 127G—Gomph	.90

Weight 1¾ Lbs. per Dozen

COMMON EDGE

Length 5½ in., Polished Steel, Rosewood Handle, Brass Ferrule

	Each
No. 125 —Osborne	$0 30
No. 125G—Gomph	.90

Weight 1 Lb. per Dozen

Half Dozen in a Box

FRENCH, SQUARE EDGE

Length 6 in., Polished Steel, Rosewood Handle, Brass Ferrule, Octagon Shank

Schedule of Sizes, in ordering always specify Size Nos. wanted

Size Nos	0	1	2	3	4	5	6	7	8
Width, In.	$\frac{1}{32}$	$\frac{1}{16}$	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{5}{16}$	$\frac{1}{4}$	$\frac{1}{2}$

STRAIGHT SQUARE EDGE	Each
No. 132 Osborne, Sizes 0 to 8	$1 40
No. 132G Gomph, Sizes 0 to 8	1 00

BENT, SQUARE EDGE	Each
No. 132½ Osborne, Sizes 1 to 8	$1 40
No. 132½G Gomph, Sizes 0 to 8	1 50

Half Dozen in a Box; Weight 1¾ Lbs. per Dozen

SADDLERS' CARVING TOOLS

Each

No. 135—Osborne; Length 6 in., Assorted Widths $\frac{1}{32}$, $\frac{1}{16}$, $\frac{1}{8}$, $\frac{3}{16}$, $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$ and $\frac{1}{2}$ in.; Polished Steel; Rosewood Handle; Flat Shank, Brass Ferrule $0 80

Weight 2 Lbs. per Dozen

SADDLERS' V GOUGES

Each

No. 136—Osborne; Length 6 in., Width at Point $\frac{1}{8}$ in.; Polished Steel; Rosewood Handle; Octagon Shank; Brass Ferrule $1 20

Weight 2 Lbs. per Dozen

Half Dozen in a Box

PATENT LEATHER TOOLS

For gouging the gum off from Patent Leather before stitching. Length 6 in., Polished Steel, Rosewood Handle; Brass Ferrule

	Each
No. 134 —Osborne	$0 80
No. 134G—Gomph	.90

Weight 1 Lb. per Dozen

REIN TRIMMING TOOLS

For Trimming Round Reins. Length 6½ in. Polished Steel Rosewood Handle; Brass Ferrule

	Each
No. 137 —Osborne	$1 00
No. 137G—Gomph	1.00

Weight 1¼ Lbs. per Dozen

Half Dozen in a Box

TICKLERS

For Creasing Edges of Loops and other Small Harness Parts

Schedule of Sizes; Note—Always Specify Size Number Wanted

Size Nos	0	1	2	3	4
Width of Blade In.	$\frac{1}{16}$	$\frac{3}{32}$	$\frac{1}{8}$	$\frac{5}{32}$	$\frac{3}{16}$

SINGLE

For Common Creasing

	Each
No. 13 Osborne, Length 6 in., Malleable Iron Polished Rosewood Handle, Octagon Shank, Brass Ferrule, Sizes 0, 1, 2, 3 and 4	$0 90

Weight 2 Lbs. per Dozen

	Each
No. 13G—Gomph; Length 5¾ in., Polished Steel Rosewood Handle, Octagon Shank, Brass Ferrule, Sizes 0, 1, 2, 3 and 4	$0 90

Weight 1¼ Lbs. per Dozen

Half Dozen in a Box

BEVEL

For Fancy Creasing

	Each
No. 14 Osborne, Length 6 in., Polished Steel Rosewood Handle, Square Shank; Brass Ferrule; Sizes 0, 1, 2, 3 and 4.	$0 90

Weight 2 Lbs. per Dozen

	Each
No. 14G—Gomph; Length 5¾ in., Polished Steel Rosewood Handle, Octagon Shank; Brass Ferrule, Sizes 0, 1, 2, 3 and 4	$0 90

Weight 1¼ Lbs. per Dozen

Half Dozen in a Box

CREASERS

For making the Creased Border and Smoothing the Edge of Strap Work

Cuts Showing Sizes of Single Creases

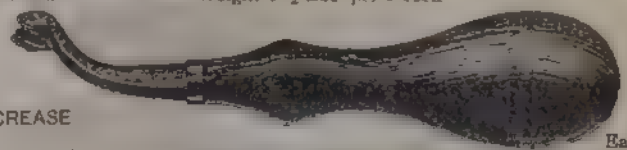
FOR SINGLE CREASE, IRON ENDS

No. 23—Osborne. Length 8 in., Polished, Malleable Iron Ends; Rosewood Handle; Brass Ferrules, to Crease 4 Sizes, Nos. 1, 2, 3, 4 . . . . . Each $1 30
Half Dozen in a Box; Weight 4½ Lbs. per Dozen

FOR SINGLE CREASE

No. 22—Osborne; Length 6 in.; Polished Steel; Rosewood Handle; Octagon Shank; Brass Ferrule; Assorted Sizes, Nos. 1, 2, 3, 4, 5, 6 . . . . . Each $1 00
Weight 2 Lbs. per Dozen — Half Dozen in a Box

No. 22G—Gomph; Length 6 in., Polished Steel; Rosewood Handle; Octagon Shank; Brass Ferrule; Assorted Sizes, Nos. 1, 2, 3, 4, 5, 6, Each . . . . . Each $1 00
Weight 1½ Lbs. per Dozen



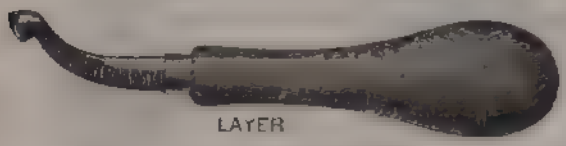
FOR DOUBLE CREASE

No. 22½—Osborne; Length 6 in., Polished Steel, Rosewood Handle; Octagon Shank, Brass Ferrule, Assorted Sizes, Nos. 1, 2, 3, 4, 5, 6 . . . . . Each $1.00
Weight 2 Lbs. per Dozen — Half Dozen in a Box

No. 22½G—Gomph; Length 6 in., Polished Steel, Rosewood Handle, Octagon Shank; Brass Ferrule; Assorted Sizes, Nos. 0, 1, 2, 3, 4, 5 . . . . . Each $1 00
Weight 1¾ Lbs. per Dozen

Cuts Showing Sizes of Double Creases

Cuts Showing Sizes of Round Edges



LAYER

For Rounding Edge and Creasing

No. 24½—Osborne; Length 6 in., Polished Steel, Rosewood Handle, Octagon Shank, Brass Ferrule, Assorted Sizes, Nos. 1, 2, 3, 4, 5 . . . . . Each $1 00
Weight 2 Lbs. per Dozen — Half Dozen in a Box

ROUND EDGE

For making Smooth Round Edge

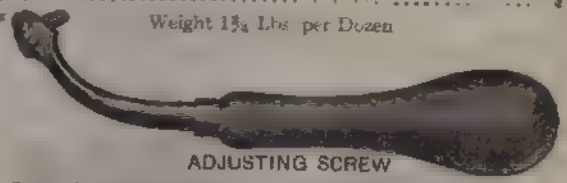
No. 24½G—Gomph; Length 6 in., Polished Steel; Rosewood Handle, Octagon Shank; Brass Ferrule; Assorted Sizes, Nos. 1, 2, 3, 4, 5, 6 . . . . . Each $1 00
Weight 1¾ Lbs. per Dozen

LIGNUM-VITAE OR EBONY

Osborne; 5½ in. Long; Polished

	Each
No. 20S—Single Crease on Each End	$0 40
No. 20D—Double Crease on Each End	50
No. 20N—Uncut, Allowing any Crease to be Cut	32
No. 20C—For Rounds, Concaved at Both Ends	50

Weight 2 Lbs. per Dozen — Half Dozen in a Box



ADJUSTING SCREW

For Fancy Creasing on Loops, etc., Adjustable to Different Widths

No. 18—Osborne; Length 6 in., Polished Steel Rosewood Handle; Brass Ferrule. . . . . Each 90
Weight 2 Lbs. per Dozen

CHANNELERS

For Cutting Channels in Traces and other Strap Work to allow Stitching to be covered

EDGE

For Making Rounds, etc.

No. 208—Osborne; Length 6 in., Brass Shank and Head, Rosewood Handle, Brass Ferrule, Polished Steel Blade . . . . . Each $2 80
Weight 2¼ Lbs. per Dozen — Half Dozen in a Box

No. 208G—Gomph, Length 6 in., Brass Shank and Head, Rosewood Handle, Brass Ferrule, Polished Steel Blade . . . . . Each $3 00
Weight 2¼ Lbs. per Dozen

STRAIGHT

For All Straight Work

No. 31—Osborne; Length 6¾ in., Malleable Iron, Polished Steel Blade, Rosewood Handle; Brass Ferrule . . . . . Each $1 80
Weight 3 Lbs. per Dozen — Half Dozen in a Box

No. 31G—Gomph; Length 6¾ in., Malleable Iron, Polished Steel Blade, Rosewood Handle; Brass Ferrule . . . . . Each $2 00
Weight 3 Lbs. per Dozen

CARRIAGES AND WHEELS

In Ordering, specify desired number of Stitches per inch; Teeth are Spaced 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 or 16 per inch

CARRIAGES WITH PRICKING WHEEL

For Marking Distances for Stitches

	Each
No. 39—Gomph; Length 6¼ in.; Polished Steel; Rosewood Handle, Brass Ferrule	$1.50

Weight 1 Lb. per Dozen

CARRIAGES WITH AND WITHOUT WHEEL

For Running over the Stitches to give them a Finished Appearance; Length 6¼ in.

	Each
No. 40G—Gomph; Solid Handle with Wheel	$1 60
No. 400—Gomph, Box Handle without Wheel but with Reservoir for Different Wheels	2 00

Weight 1½ Lbs. per Dozen

Half Dozen in a Box

CARRIAGES WITH STATIONARY FINISHING WHEEL

Used same as an Overstitch Wheel to give a Finished Appearance to the Work, Length 6 in., Polished Steel; Rosewood Handle, Brass Ferrule

	Each
No. 40—Osborne; Octagon Carriage	$1 50
No. 40T—Osborne; Thin Carriage	1 50

Weight 1 Lb. per Dozen

OVERSTITCH OR FINISHING WHEELS

For Box Carriage

Sizes indicate Number of Stitches per inch

	Each
No. 400X—Gomph; Sizes 4 to 16	$0 64

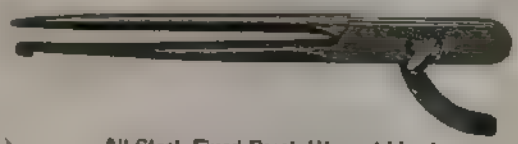
Weight ¾ Lb. per Dozen

Half Dozen in a Box

PATENT LEATHER COMPASSES

For Channeling or Grooving Leather so that the stitches will come below the surface, Plain Point running along Edge acts as Parallel Guide for Channeler

With Assorted Points



Osborne

All Steel, Fixed Point, Wing at Head

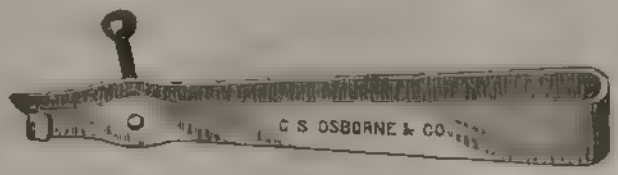
	Each
No. 30½—Length 6 in., Malleable Iron, Polished; 4 Steel Points. Weight 2¼ Lbs. per Dozen	$3.00
Extra Points for Above Compass	.20
Scratchers for Extra Points	.20

	Each
No. 29—Length 5½ in., Polished Steel	$1 50

Weight 3 Lbs. per Dozen

Half Dozen in a Box

Malleable Iron, Fixed Steel Point; Low Wing



Spring

	Each
No. 30—Length 5¼ in., Malleable Iron, Polished; Steel Point	$1 50

Weight 2½ Lbs. per Dozen

	Each
No. 29½—Length 4¼ in., Polished Steel; Adjusted by Set Screw	$1 00

Weight 1 Lb. per Dozen

Half Dozen in a Box

SADDLERS' COMPASSES OR DIVIDERS

Used for Spacing Distances, Creasing, etc.

No. 26—SADDLERS' Polished Steel				
Length, In.	5	6	7	8
Weight per Dozen, Lbs.	3	3¼	3½	4
Each	$1.00	1.00	1.20	1.20

No. 28—COMMON Malleable Iron, Polished		
Length, In.	5	6
Weight per Dozen, Lbs.	1¾	2⅝
Each.	$0.40	.44

One Dozen in a Box

For Mechanics' Calipers, Dividers and Compasses, see Tool Dept. Page

CLAW TOOLS

EXTRA HEAVY
For Pulling Tacks

No. 123—Osborne; Length 6¾ in.; Best Quality Crucible Cast Steel, Polished, Rosewood Handle, Riveted Round Shank; Brass Ferrule..... $1.00

Weight 3¼ Lbs. per Dozen

OCTAGON
For Pulling Tacks

Each

No. 124—Osborne; Length 6½ in.; Crucible Cast Steel, Polished, Rosewood Handle, Riveted, Octagon Shank; Brass Ferrule..... $0.80

Weight 2½ Lbs. per Dozen

ROUND
Length 6½ in., Polished Steel; Round Shank; Brass Ferrule

Each

No. 122—Osborne, First Quality; Rosewood Handle..... $0 60

No. 0122—Osborne; Second Quality, Black Handle..... .40

Half Dozen in a Box
Weight 2½ Lbs. per Dozen

Half Dozen in a Box

SADDLERS' HAMMERS

FRENCH PATTERN TACK Each

No. 55—Osborne; Polished Steel Head, Length 6¾ in. Oval Rosewood Handle, Length 10 in., Strongly Riveted . $3 00

Weight 1¼ Lbs. Each

COMMON TACK Each

No. 56—Osborne; Polished Steel Head, Length 6 in., First Quality, White Hickory Handle, Length 10½ in. .$1 50

Weight ¾ Lb. Each

Half Dozen in a Box

SADDLERS' RULES

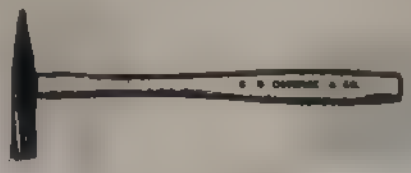
Best Quality Maple, Shellac Finish, 1¼ in.

	No. 161 Brass Bound		No. 162 Best		No. 163 Common	
Length, Feet.	2	3	2	3	2	3
Wt. per Doz...	4¼	4¾	3½	4	3	3½
Each. $2.50	4.00	.80	1.00	.70	.90	

Open Stock

No. 54—SHOE
Polished Steel Head; First Quality White Hickory Handle

Size Nos.	0	1	2	3	4	5
Diam of Head, In.	1⅜	1⅞	1½	1⅝	1¾	1⅞
Weight Each, Lbs	⅞	1	1⅛	1¼	1⅜	1½
Each . .	$0.64	.70	.80	.90	1.00	1.10



No. 57—RIVETING
Polished Steel Head; First Quality White Hickory Handle

Size Nos. . .	1	2	3
Diam. of Head, In..	½	⅝	¾
Weight Each, Lbs. .	½	⅝	⅞
Each	.$0.80	.90	1.00

Half Dozen in a Box

BOUNCERS

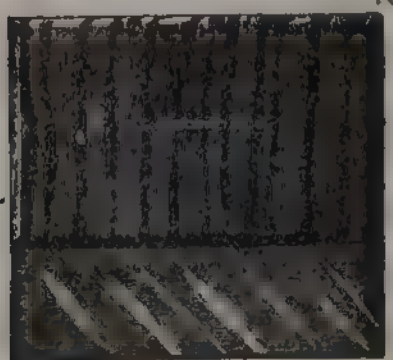
For Smoothing Down Foldwork Each

No. 10—Dogwood, Length 5 in., Diam 2¾ in $0 50

Open Stock; Weight 2¾ Lbs. per Dozen

SLICKERS

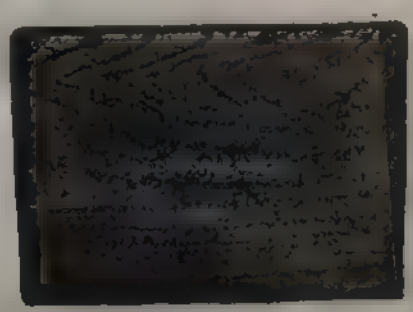
For Slicking or Smoothing Down the Work



Glass; Size 5x4½ in. Each

No. 167—With Handle..... $1 20
Weight 6 Lbs. per Dozen

No. 167½—Without Handle..... .50
Weight 4 Lbs. per Dozen



Size 5¼x4 in. Each

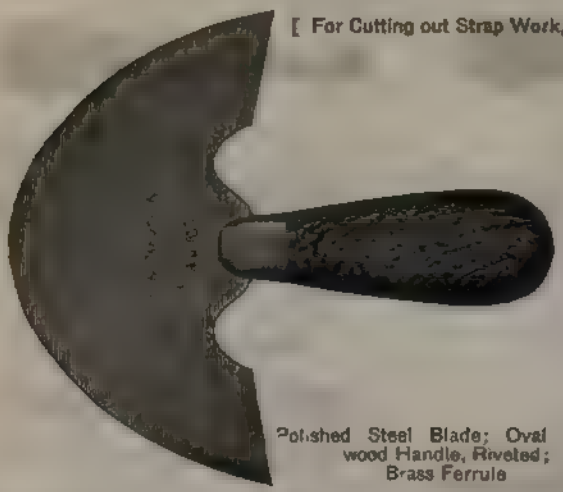
No. 168L—Lignum-Vitae..... $0 80
Weight 4 Lbs. per Dozen

No. 168S—Steel..... 1 20
Weight 7 Lbs. per Dozen

Half Dozen in a Box

ROUND KNIVES AND HEAD KNIVES

[For Cutting out Strap Work, Fitting, Trimming and General Bench Work



Polished Steel Blade; Oval Rosewood Handle, Riveted; Brass Ferrule

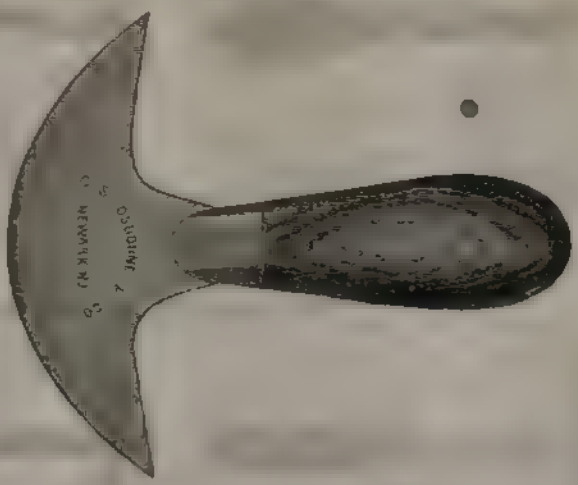
No. 70—OSBORNE, ROUND

Width of Blade, In	5	6	6½	7
Weight per Dozen, Lbs.	3¼	4⅝	5	6¼
Each	$2.00	2.40	2.80	3.80

No. 709—GOMPH, ROUND

Width of Blade, In	4	4½	5	5½	6	6½
Weight per Dozen, Lbs.	2¾	3	3½	4	4⅛	4¾
Each	$2.62	2.62	3.16	3.16	3.68	4.21

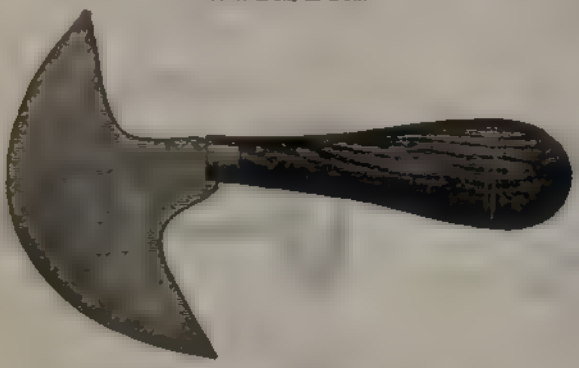
Half Doz. in Box.



OSBORNE, PHILADELPHIA PATTERN, HEAD

	Each
No. 75—Width of Blade 4⅛ in., Polished Steel; Oval Rosewood Handle; Brass Ferrule	$1 30

Weight 2½ Lbs. per Dozen



GOMPH, FRENCH PATTERN, HEAD

This Pattern can also be used as a Round Knife

	Each
No. 175—Width of Blade 4½ in., Polished Steel; Oval Rosewood Handle, Brass Ferrule	$2.50

Weight 2½ Lbs. per Dozen

SMALL HEAD, ONE POINT

For Cutting out Curved Work; this Style is also largely used by Art Glass Workers

Width of Blade 2¾ in.; Polished Steel; Oval Rosewood Handle, Brass Ferrule

	Each
No. 73 —Osborne	$1 00
No. 73G—Gomph	2 00

Half Dozen in a Box; Weight 1½ Lbs. per Dozen

Half Dozen in a Box

CAP KNIVES

For Cutting Thread, Paring and Trimming Edges, etc.

POINTED END

This Style is the most popular

Round Handle

Polished Steel Blade; Rosewood Handle; Brass Ferrule

	Each
No. 79 —Osborne; 3½ in.	$0 40
No. 793G—Gomph; 3½ in. Blade	60
No. 795G—Gomph; 5 in. Blade	1 00

Flat Handle

Polished Steel Blade; Rosewood Handle, Riveted

	Each
No. 80—Osborne; 3½ in. Blade	$0 70
No. 83 —Gomph, 3½ in. Blade	70
No. 85—Gomph, 5 in. Blade	1 00

Osborne One Dozen, Gomph Half Dozen in a Box; Average Weight 1½ Lbs. per Dozen

SQUARE POINT

Round Handle

Polished Steel Blade; Rosewood Handle; Brass Ferrule

	Each
No. 763 —Osborne, 3½ in. Blade	$0 40
No. 765 —Osborne; 5 in. Blade	60
No. 763G—Gomph; 3½ in. Blade	60
No. 765G—Gomph; 5 in. Blade	1 00

Flat Handle

Polished Steel Blade; Rosewood Handle, Riveted

	Each
No. 77 —Osborne; 3½ in. Blade	$0 70
No. 773G—Gomph, 3½ in. Blade	70
No. 775G—Gomph, 5 in. Blade	1 00

Osborne One Dozen, Gomph Half Dozen in a Box, Average Weight 1½ Lbs. per Dozen

DRAW GAUGES

For Cutting Straps in Accurate Widths from Side Leather

LATTA'S PATENT, Handle Binds Slide

Each

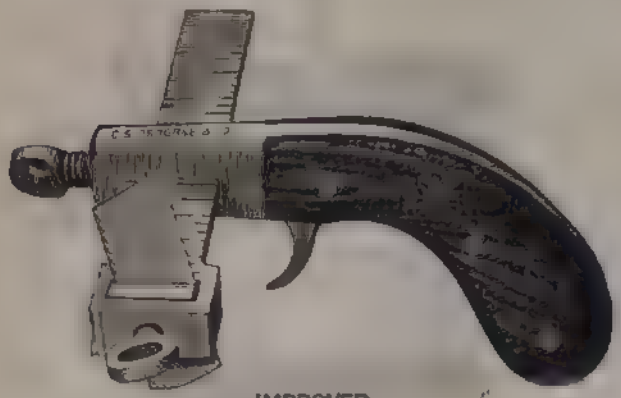
No. 52—Length over all 5½ in., Iron Frame, Rosewood Handle, Polished Steel Slide ⅝ in. Wide, Graduated ⅛ in. to 4 in., Length over all 5½ in. Crucible Cast Steel Blade, 3 in. Long, ¾ in. Wide; Screw Handle allows quick adjustment $3 50

IMPROVED, BRASS FRAME

Each

No. 51—Osborne; Length over all 5¾ in., Polished Brass Frame, Inlaid Rosewood Handle; Polished Steel Side, ¾ in. Wide, Graduated ⅛ in. up to 4 in., Length over all 5¾ in.; Crucible Steel Blade, 3 in. Long, ¾ in. Wide. $3 50

Half Dozen in a Box; Weight 11¼ Lbs. per Dozen



IMPROVED

Each

No. 52½—Osborne; Length over all 5¾ in., Polished Iron Frame, Riveted Rosewood Handle; Polished Steel Slide ⅝ in. Wide, Graduated ⅛ in. up to 4 in., Length over all 5¾ in.; Crucible Cast Steel Blade, 3 in. Long, ¾ in. Wide..... $2 50

Weight 9¾ Lbs. per Dozen

HOLLOW HANDLE

Each

No. 51½—Osborne; Length over all 5¾ in., Iron Handle, Natural Finish Butt, Polished Head, Polished Steel Slide ¾ in. Wide, Graduated ⅛ in. up to 4 in., Length over all 5¾ in., Crucible Cast Steel Blade, 3 in. Long, ¾ in. Wide..... $2.00

Weight 11½ Lbs. per Dozen

Half Dozen in a Box

EXTRA BLADES FOR ABOVE GAUGES

Each

Length 3 in., Width ⅜ in., Polished Crucible Cast Steel..... $0 20

One Dozen in a Box; Weight ¼ Lb. per Dozen

SADDLERS' SPOKE SHAVES

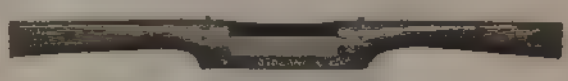
For Trimming and Smoothing work; Finishing the Edges after Stitching, etc.

SCREW ADJUSTMENT

Each

No. 163—Osborne; Length 10½ in., Rosewood Stock, Polished Brass Adjusting Screws and Plate, Pointed Crucible Cast Steel Blade, Assorted Lengths 2, 2½ and 3 in..... $2.40

Weight 4 Lbs. per Dozen



LIGHT, PLAIN

Each

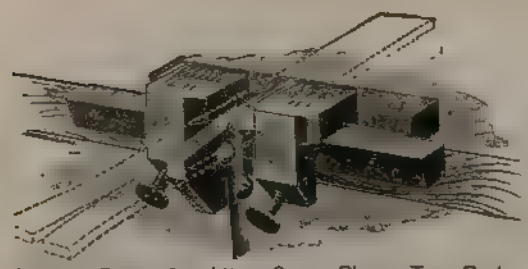
No. 163½—Osborne; Length 11 in., Rosewood Stock, Blade may be Adjusted by two Pins on the Back, Polished Crucible Cast Steel Blade, Assorted Lengths 2, 2½ and 3 in $1.20

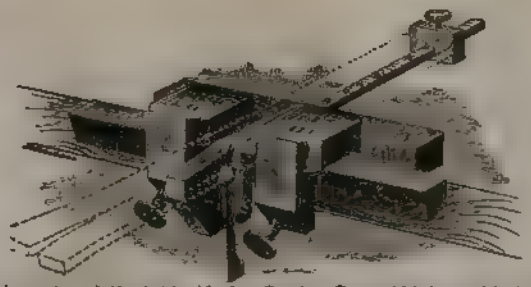
Weight 3 Lbs. per Dozen

Half Dozen in a Box

For Wood Workers' Spoke Shaves, see Tool Dept.

STRAP SLITTERS





The best Device for slitting Crown Pieces, Turn Backs, Overchecks, Martingales, etc.; Adjustable Knife, Guides Open 2½ In.; will slit Straps in the center ½x½, etc., or can be set to slit ½x⅝ or any other Combination desired; every Harness Shop should have one of these Tools and Piece Workers can save their cost in a very few days. Made of Polished Iron, Length 5 in.; Size of Blade 2x¼ in.

Each

No. 1—Without Gauge Rule Attachment $2.50
Weight 2½ Lbs. Each

Each

No. 2—With 12 in. Gauge Rule Attachment $3 30
Weight 4 Lbs. Each

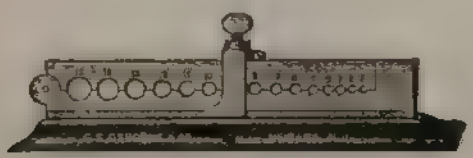
One in a Box

STRAP ROUNDERS

For Rounding Checks, Reins, Winker Braces, etc.

Schedule of Sizes of Holes

Size Nos.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Diam. of Hole, In.	1/32	1/16	3/32	1/8	5/32	3/16	7/32	1/4	9/32	5/16	11/32	3/8	1	1 1/32	1 1/16



With Thumb Screw for keeping Center from Springing Up

BOSTON PATTERN, WITH BASE — Each

No. 116—With 15 Holes, all Sizes 1/32 to 1½ in.; Length over all 14½ in., Height 4½ in., Iron Polished Top, Japanned Base; Fastens to Bench with 4 Screws $15.00

Weight 7 Lbs. Each

WITH BRASS CLIP — Each

No. 109—With 12 Holes, Sizes 1 to 12, 1/32 to 7/32 in., Length over all 13 in., Height 4 in.; Polished Iron; Fastens to Bench with 4 Screws $8.80

Weight 4 Lbs. Each

One in a Box; Furnished Promptly from Factory

With Thumb Screw for Keeping Center from Springing Up

Each

No. 110—With 11 Holes; Sizes 1 to 11, 1/32 to ¾ in., Length over all 12½ in.; Height 3½ in.; Polished Iron, Fastens to Bench with 4 Screws $7 50

Weight 3¼ Lbs. Each

Each

No. 111—With 11 Holes; Sizes 1 to 11, 1/32 to ¾ in., Length over all 12½ in.; Height 3 in.; Polished Iron; Fastens to Bench with 4 Screws $7.00

Weight 3¼ Lbs. Each

One in a Box

Each

No. 114—With 9 Holes; Sizes 1 to 9, 1/32 to 5/32 in.; Length over all 10 in., Height 2½ in.; Polished Iron; Fastens in a Vise $5 00

Three in a Box; Weight 1½ Lbs. Each

MEYERS' STRAP HOLDERS

Each

No. 195—Height 5 in.; made of Iron, Natural Finish; holds any Width of Strap; Fastens to bench or wall with Screws. $0 80

Weight 1¼ Lbs. Each

Open Stock

RANDALL'S STITCHING HORSES

Each

No. 1912—Height Jaws 17½ in., Width 5 in.; Thickness at Base 3 in.; Sugar Maple Oil Finished Jaw with Steel Spring; Stool Seat is made of 2 in. Poplar, Hollowed; Hickory Legs and Rounds. $5.00

Weight 18 Lbs. Each

Open Stock

EXTRA JAWS

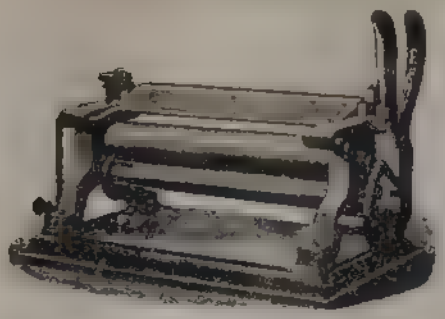
Can Furnish in any Height — Each

No. 92—Jaw for Randall's Horse; Regular Height 17½ in. is carried in Stock, any other Height made to Order $2.80

Weight 5 Lbs. Each

SPLITTING MACHINES

For Splitting or Skiving Leather to make it a Uniform Thickness and Beveling Ends of Straps for Buckles, etc.



KREB PATENT — Each

No. 83—Length of Blade, 10 in.; Japanned Iron Frame; a Cam and Lever Gauges the Lower Roll a Dial Index duplicates the Thickness of the last Strap Cut; the Stock can be nicely skived by moving the Cam Lever as it is drawn through, an Upper Spring Roll prevents gouging; Fastens to the Bench with Two Screws $24.00

One in a Box; Weight 15 Lbs. Each

KEYSTONE — Each

No. 84 Length of Blade 8 in.; Japanned Iron Frame; Polished Steel Roller and Knife; Size of Skiving or Splitting Regulated by Gauge $18 00

One in a Box; Weight 13 Lbs. Each

No. 171—CHASE

Japanned Iron Frame, Polished Rolls and Adjusting Screws; Absolutely Reliable, will not cut a Strap in two

Length of Blade, In.	8	10	12
Weight Each, Lbs.	10	11	13
Each	$12.00	14.50	16.00

No. 86—OSBORNE

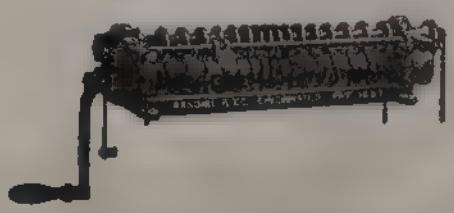
Japanned Iron Frame; Polished Roll and Adjusting Screws

Length of Blade, In.	5	6	8
Weight Each, Lbs.	5½	6½	7½
Each	$7.50	8.00	10.00

One in a Box

CREASING MACHINES

For Creasing Edges of all kinds of Strap Work with Plain or Fancy Creases



RANDALL

The greatest Improvement in Creasing Machines of today is the adoption of 4 Cog Gear in place of the 2 Cog; with the 4 Cog Gear the thickest Trace can be Creased or Finished without Throwing the Teeth out of gear as is the case with a 2 Cog Machine, the Frame is One Piece of Cast Iron and is very stiff and rigid, Journal Boxes are Adjustable and may be removed and renewed when worn out, the Rolls have heavy Flanges or Dividers, separating the widths. The Creases are shaped with accuracy and care, and resemble Hand Creased Work.

Sizes ½ to 1¾ and ½ to 1½ in. — Each

No. 2—Creases ½, ⅝, ¾, ⅞, 1, 1⅛, 1¼, 1⅜, 1¾ in. Flat, and ½, ⅝, ¾, ⅞, 1, 1⅛, 1¼, 1½ in. Raised Double Crease $70 00

No. 2½—Creases ½, ⅝, ¾, ⅞, 1, 1⅛, 1¼, 1⅜, 1¾ in Flat, Round Edge, Single Crease, and ½, ⅝, ¾, ⅞, 1, 1⅛, 1¼, 1½ in. Raised Double Crease 70.00

No. 3—Creases ½, ⅝, ¾, ⅞, 1, 1⅛, 1¼, 1⅜, 1¾ in. Flat, Double Crease, and ½, ⅝, ¾, ⅞, 1, 1⅛, 1¼, 1½ in Flat, Round Edge, Single Crease 70 00

No. 3½—Creases ½, ⅝, ¾, ⅞, 1, 1⅛, 1¼, 1⅜, 1¾ in Flat, and ½, ⅝, ¾, ⅞, 1, 1⅛, 1¼, 1½ in Raised, Round Edge, Single Crease 70 00

Weight 65 Lbs. Each

Sizes ½ to 1¾ in. and 1 to 1½ in. — Each

No. 10—Creases ½, ⅝, ¾, ⅞, 1, 1⅛, 1¼, 1⅜, 1¾ in. Flat, and 1, 1⅛, 1¼, 1½ in Raised Double Crease. $56 00

No. 10½—Creases ½, ⅝, ¾, ⅞, 1, 1⅛, 1¼, 1⅜, 1¾ in. Flat, Round Edge, Single Crease, and 1, 1⅛, 1¼, 1⅜ in. Raised Double Crease 56 00

No. 11—Creases ½, ⅝, ¾, ⅞, 1, 1⅛, 1¼, 1⅜, 1¾ in. Flat and 1, 1⅛, 1¼, 1⅜ in. Raised Round Edge Single Crease 56.00

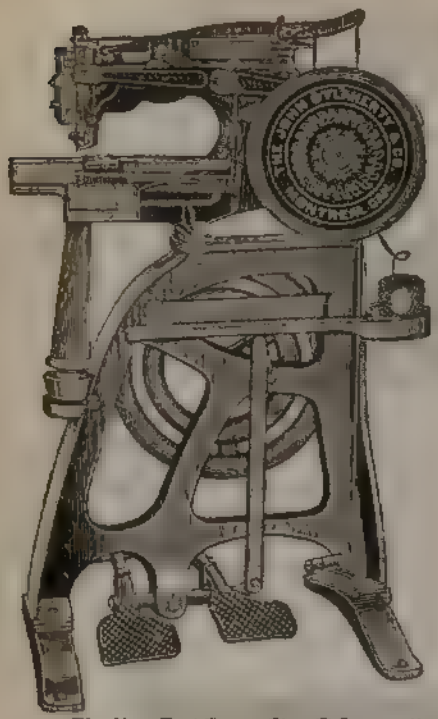
Any Style of Roll with ¾ in. Hole may be worked on the End Shaft of Machine

Weight 75 Lbs. Each

Any Style of Crease Furnished on Special Order

One in a Box

HARNESS SEWING MACHINES



A New Automatic Lock-Stitch Wax-Thread Sewing Machine on a foot power Stand; the machine can be run by Hand, Foot, Steam or other Power and being very light-running, simple and practically automatic, can be operated by any one without other instructions than are given in book of Instructions with each machine. The Lock Stitch, when well made, is equal if not superior to Hand Sewing and the range is from light single strap up to one inch thick, in Plain Raised and Waxed Work, with threads from 3 to 8 cord and from 4 to 12 stitches to the inch; Dry Thread, Liquid Wax or Mucilage (for which there is a solution box attached to the machine) can be used without heating the machine, also Hard Wax, waxing both threads by means of the new Patent Apparatus (heated by lamp or gas) which, while allowing the thread to pass dry through the needle afterwards dips it into boiling wax and thus thoroughly coats the thread and fills the holes.

There is no Top Tension or Thread Lever to require accurate or careful adjustment, but the exact amount of thread for each stitch is automatically drawn off ball or reel and then locked till stitch is pulled in. Shuttle is enlarged and simplified, and has but one hole to thread-up, while the shuttle thread is automatically pulled just into bottom surface of the leather, whether work being stitched is thick or thin; this practically increases very largely the capacity of shuttle by saving shuttle thread; a Needle Guard is used, which prevents breakage of fine needles when stitching heavy work; stitch Regular and Index are added; Adjustment has been so improved that missing stitches are practically impossible; Needle has been improved and strengthened; Presser-Foot for setting up stitch while sewing, has been improved; Patent Hard Waxer has been simplified and is heated by one oil-lamp or gas jet; Solution-wax Box has been improved; Winder for bobbins is much simplified, and can be used for hot or cold wax, or dry thread.

Made on interchangeable system and all parts numbered; the speed is limited practically only by ability of the operator to handle work; and material up to full range of the machine has been stitched without a single adjustment or alteration of any part.

The New Foot Power Stand is unequalled for speed and ease of operation.

This machine is carefully packed one in a case, the Foot Power Stands when required, being shipped in a separate crate. All duties and custom Charges are Paid, leaving purchaser only the freight to pay in addition to price of machine. Price includes Presser-Foot for plain work and 5 for pricking up stitch while being made, Tracé Guide, 4 Needle Guards, a supply of Needles and Bobbins, Winder, Can of Wax, Reel of Thread, and Instructions; the only extra charge is for "Rounder". To get machine to work, it is only necessary to lift from case, put the main cam on, and set on stand or bench. Repair parts are interchangeable and will be shipped from Factory upon request. Any good thread and wax can be used

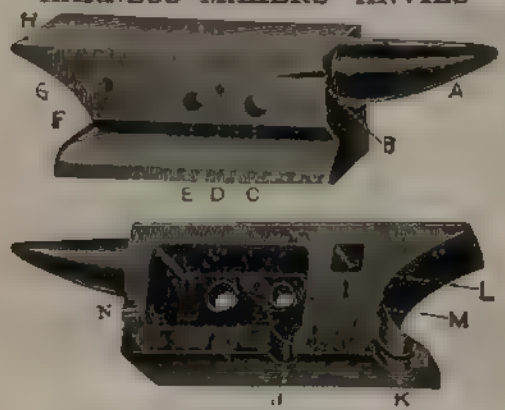
	Each
No. 6—Machine Fitted for Dry Thread and Liquid Wax without Stand	$400 00

One in a Case; Weight 140 Lbs. Each

EXTRA PARTS

	Each
Patent Hard Wax Apparatus; Weight 5 Lbs. Each	$40 00
Foot Power Stand; Weight 172 Lbs. Each	50 00
Top and Bottom Channellers and Guides for "Rounds"; Weight ½ Lb. Each	10 00

HARNESS MAKERS' ANVILS



HANDY

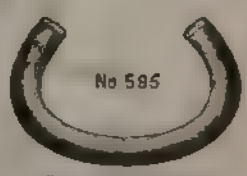
A Combination of Many Tools in One; Saves Much Time and Space

A—Horn End for Riveting, etc., B Small Groove for Straightening Awls and Rivets, C E and J Holes for knocking out Rivets, etc., D—Small Hole to draw up Rivets, etc., F Raise Groove, for raising Layers, etc., G Countersink, for riveting Hame Rivets, etc.; H—Square Cut-under End, for blocking up Loops, etc., I Top for hammering down work, K Set for Rope Clamps, L—Square Hole ⅝x1½ in. Deep for Hardy, M Space 2x3¾x2 in. deep for, blocking up and raising Loops over, N Groove for attaching Schmitt's Winker Brace Clamps.

	Each
No. 150—Size 11x3x3 in.; Highest Grade Casting, Smoothly Finished; Polished Top	$3 00

Open Stock; Weight 11 Lbs. Each

ROPE HALTER DIES AND ANVILS



Rope Halter Clamps

For making Rope Halter Lead, Horse and Cattle Ties

	Per Dozen
No. 594—1¾ in. High x 1½ in. Wide x 3½ in. Long will take all size of Clamps	$12 80

Weight 1 Lb. 3 Oz. Each. 4 Dozen Sets ½ in. Clamps with Each Die

ROPE HALTER CLAMPS

No. 595—Halter Clamps; to be used with Anvil shown above, made of Steel; Galvanized

Size, In	½	⅝	¾
Weight Gross, Lbs	5¾	6	6¼
Per Gross Sets	$1.34	1.60	1.86

One Gross Sets in a Box

Gross Set consists of 2 Gross Large Clamps, for double end of Rope, and 1 Gross of Small Clamps for single end of Rope.

FINEST GENUINE RICH AMERICAN CUT GLASS

ILLUSTRATIONS ARE REDUCED SIZE.

MAYONAISE SET

Diameter of plate inches, diameter of bowl inches, height 2½ inches.

No. 5115 Per set, complete . . . $9.00

MAYONAISE SET

Plate 5½ inches wide, 7½ inches, length over all 5½ inches wide, 7½ inches, height 2½ inches.

No. 5116 Per set, complete . . . $9.00

MAYONAISE SET

Diameter of plate inches, diameter of bowl inches, height 2½ inches.

No. 5117 Per set, complete . . . $14.00

PITCHER

	Each
No. 5118 4 pints, height, 11 inches	$20.00

PITCHER

	Each
No. 5119 4 pints; height, 11 inches	$20.00

PITCHER

	Each
No. 5120 3 pints; height, 8 inches	$13.50
No. 5121 4 pints; height, 8¾ inches	20.00

PITCHER.

	Each
No. 5122 4 pints; height, 11 inches	$12.25

PITCHER.

	Each
No. 5123 3 pints; height, 9⅛ inches	$13.50
No. 5124 4 pints; height 11 inches	16.75

PITCHER.

	Each
No. 5125 4 pints, height 11 inches	$22.25

FINEST GENUINE RICH AMERICAN CUT GLASS

Illustrations are reduced size.

WATER SET.

Set consists of one carafe, capacity, 1 quart, height, 8 inches, six tumblers, height, 4 inches, and 14 inch footed mirror plates, burnished silver plated border. No. 5124 Complete set, as illustrated.... $37.75

WATER SET.

Set consists of one carafe, capacity, 1 quart, height, 7½ inches, six tumblers, height, 4 inches, and 14 inch footed mirror plates, burnished silver plated border. No. 5128 Complete set, as illustrated.... $26.25

We carry the most complete stock in the West.

WATER SET.

Set consists of one pitcher, capacity, 2 pints, height, 8 inches, six tumblers, height, 4 inches, and 14 inch footed mirror plates, burnished silver plated border. No. 5131 Complete set as illustrated.... $40.00

TEA BELL.

Height, 5 inches. No. 5127 Each.....$3.75

TEA BELL.

Height, 5 inches. No. 5128 Each.....$5.75

PITCHER.

No. 5140 4 pint, height 11 inches. Each.....$20.00

PITCHER.

No. 5132 2 pint, height 9½ inches. Each.....$11.25
No. 5134 4 pint, height 11 inches. Each.....14.50

Finest Genuine Rich American Cut Glass

Illustrations Are Reduced Size

WATER SET

Set consists of one pitcher, capacity four pints, height 11 inches, six tumblers, height 4 inches, and footed 14 inch [illegible] pattern, burnished silver plated border

No. 5134 Complete set, as illustrated $37.75

WHISKEY SET

Set consists of one [illegible] capacity one pint, height, six tumblers, [illegible] and footed [illegible] pattern, burnished silver plated border

No. 5135 Complete set, as illustrated $10.00

PITCHER

Four pint, height 8¾ inches

No. 5136 Each $7.75

WATER SET

Set consists of one pitcher, capacity four pints, height 11½ inches, six tumblers, height 4 inches, and four footed [illegible] pattern, burnished silver plated border

No. 5137 Complete set, as illustrated $50.00

PITCHER

No. 5138 Three pint, height, 8 inches. Each..... $10.00

No. 5139 Four pint, height, 8¾ inches. Each..... 14.50

Finest Genuine Rich American Cut Glass

PERUSE THESE PAGES CAREFULLY AND NOTE THE VARIED AND CHOICEST DESIGNS FROM WHICH YOUR SELECTION CAN EASILY BE MADE

Satisfaction to our customers has been our fundamental principle in establishing our business, we strive to please at all times. Our prices are based upon small profits and always represent full value.

Illustrations are Reduced Size

WATER SET

Set consists of one pitcher, capacity 4 pints height 13 inches, six tumblers height, 4 inches, and footed 14-inch mirror plateau, burnished silver plated border.
No 5144 Complete set as illustrated $66 50

SPOON HOLDER

Height 5 inches
No 141 Each $1 00

CATSUP BOTTLE

Height 7½ inches
No $1 00

When you compare prices consider the quality

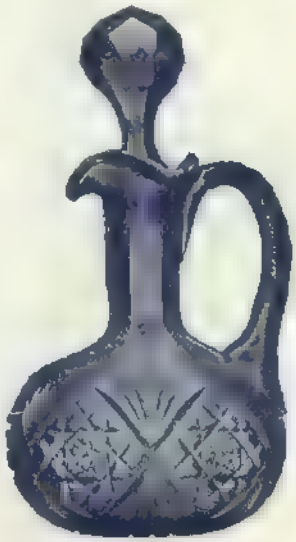
Small orders at low prices are invited

SPOON HOLDER

Height, 5 inches
No 5143 Each $5 00

WATER SET.

Set consists of one pitcher, capacity 4 pints height 13 inches, six tumblers height, 4 inches, and footed 14-inch mirror plateau, burnished silver plated border.
No 5144 Complete set as illustrated $66 50



WINE DECANTER.

Capacity, 1 quart. Height, 12 inches
No 5145 Each $18 00

THE RICHEST GENUINE AMERICAN CUT GLASS

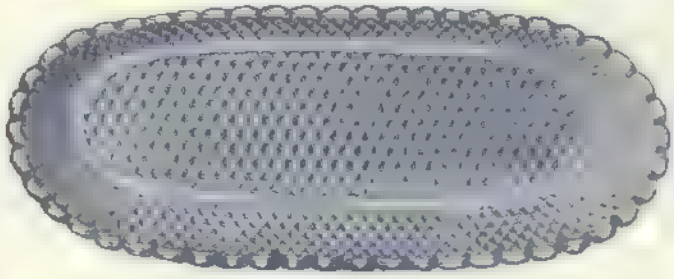
ILLUSTRATIONS ARE REDUCED SIZE.

NOTE—It is a physical impossibility to reproduce this product by wood cutting or photography. These photos illustrated do not do justice to the goods itself.

THE RICHEST, MOST ELABORATE AND EXQUISITE CUT GLASS EVER MANUFACTURED.

The lustre suggests the blue-white radiance of diamonds accomplished by the master hands and extreme care exercised at our factory.

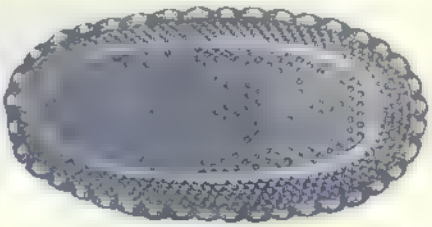
IT IS TRUE ART—CRYSTALLIZED.



CELERY TRAY.

Length, 11½ inches.

No. 5146 Each $28 00



SPOON TRAY.

Length, 8 inches.

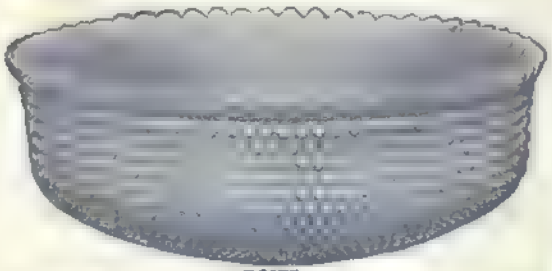
No. 5147 Each $9 00

TUMBLERS

Height [illegible]

Per doz.

No. 5148 $66 75



BOWL.

No. [illegible] [illegible] $4 [illegible]

SUGAR AND CREAM SET

No. [illegible] [illegible] $2.25

DEEP FANCY

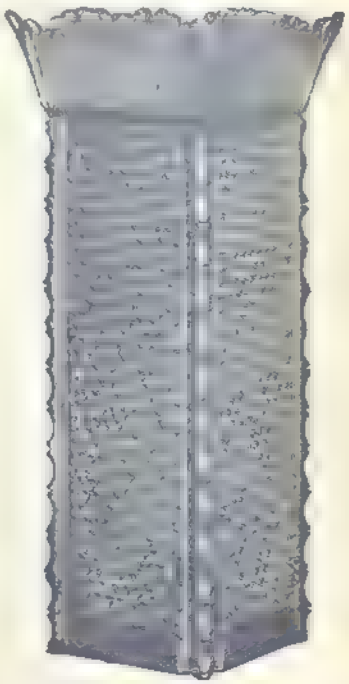
No. [illegible] 6 inch diameter [illegible] $1 [illegible]

No. 152 10 inch diameter [illegible] 2 [illegible]

COMPORT

Height [illegible]

No. 5153 Each $22 25



VASE.

			Each
No. 5154	Height,	10 inches	$33 50
No. 5155	Height,	12 inches	44 50
No. 5156	Height,	14 inches	62 50

ALL ORDERS FILLED SAME DAY RECEIVED

PITCHER.

Capacity 4 pints; height [illegible]

No. 5157 Each $33 50

PITCHER.

Capacity, 4 pints; height, 8¾ inches.

No. 5158 Each $29 00

BOWL.

No. 5159 8 inches. Each .. $26 75

FINEST GENUINE RICH AMERICAN CUT GLASS

ILLUSTRATIONS ARE REDUCED SIZE

VIOLET VASE
Height [illegible]
Diameter [illegible]
No. 160 [illegible] $[illegible]

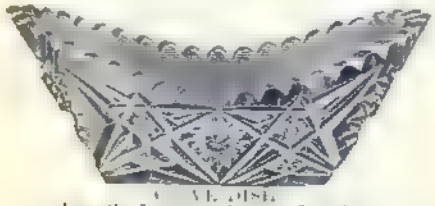
ROSE BOWL
Height, 4 inches.
Diameter, 5 inches
No. 5161 Each $5.00

TOOTH PICK HOLDER
Height 2½ inches
No. 5162 Each $1.75

BASKET, Popular "Marie" fresh deep cut
Height [illegible] inches, width 6 by 10 inches
No. 5165 Each $[illegible]

SALT CUP
Diameter, 1¾ inches
Height, 1 inch
No. 5163 Each.....$ 60

BUTTER DISH AND PLATE
Diameter of plate 7½ inches
Height complete 5 inches
No. 5164 Set complete $13.50



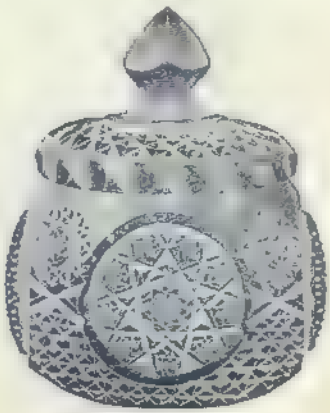
SALAD DISH
Length [illegible] inches, height 3 inches
No. 5166 Each..... $4.00

BASKET
Height [illegible] including handle 6½ inches, length [illegible] inches, width, 4½ inches
No. 5167 Each..... $9.00

MAYONNAISE SET
Diameter of plate, 6 inches; diameter of bowl, 5½ inches, height, 3½ inches
No. 5168 Complete set.....$10.00

WINE SET
Set consists of one decanter, capacity one quart, height 12 inches; six sherry glasses, height 4⅜ inches, and one 12-inch footed mirror plateau, burnished silver plated border
No. 5159 Complete set, as illustrated $55.50

CIGAR JAR
Height, 7¼ inches.
Diameter of body, 6 inches.
No. 5170 Each.....$22.50



TOBACCO JAR
Height, [illegible] inches
Diameter of body, 5½ inches.
No. 5171 Each $26.75

Finest Genuine Rich American Cut Glass

Illustrations Are Reduced Size

TUMBLERS
Height, 4 inches
Per doz.
No. 5172.. $[illegible]

TUMBLERS
Height, 4 inches
Per doz.
No. 5173 $[illegible]

TUMBLERS.
Height, 4 inches.
Per doz.
No. 5174 $20.00

TUMBLERS.
Height, 4 inches.
Per doz.
No. 5175 .... $22.25

TUMBLERS.
Height, 4 inches.
Per doz.
No. 5176 .... $26.75

TUMBLERS.
Height, 4 inches
Per doz.
No. 5177 .. $26.75

TUMBLERS
Height, 4 inches.
No. 5178 Per doz.... $31.25

TUMBLERS
Height, 4 inches.
No. 5179 Per doz.... $[illegible]

TUMBLERS
Height, 4 inches.
No. 5180 Per doz....$53.35

TUMBLERS
Height 4 inches.
No. 5181 Per doz....$53.35

SHERBET CUPS
[illegible]
Height 4 inches.
No. 5182 Per doz. $66.75

The tracings are as exquisite, varied and delicate, as frost imagery. The lustre suggests the blue white radiance of diamonds.

FINGER BOWLS
Height [illegible] inches.
Diameter [illegible] inches.
No. [illegible] Each $3.75

CORDIAL
Height 3[illegible] inches.
Per doz.
No. 5183.... $35.50

WINE
Height, 4[illegible] inches
Per doz.
No. 5184.....$40.00

SHERRY
Height, 4[illegible] inches
Per doz.
No. 5185 ... .$40.00

CLARET.
Height, 4½ inches
Per doz.
No. 5188....$44.50

CHAMPAGNE
Height, 4[illegible] inches.
Per doz.
No 5187 $[illegible]

GOBLET
Height, 6[illegible] inches
Per doz.
No 5188.. $55.75

PUNCH CUPS.
[illegible]
Height 2¾ inches.
Per doz.
No. 5190.....$40.00

Master hands and extreme care account for the rare brilliance

GOBLET
Height, 6¾ inches
Per doz.
No. 5191....$56.75

CHAMPAGNE
Height 4¾ inches
Per doz.
No. 5192 .. $56.75

CLARET
Height [illegible] inches.
Per doz.
No. 5193....$44.50

SHERRY
Height, 4½ inches
Per doz.
No. 5194 ... $40.00

WINE
Height, 4½ inches
Per doz.
No. 5195 ... $40.00

CORDIAL
Height, 3¾ inches
Per doz.
No 5196.... $35.50

FINGER BOWLS.
[illegible]
Height [illegible] inches.
Diameter [illegible] inches.
No. [illegible] Each $3.75

PUNCH CUPS.
Height, 2¾ inches.
Per doz.
No. 5198.....$35.50

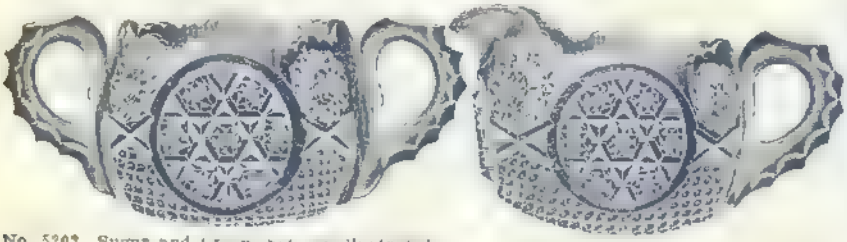
Finest Genuine Rich American Cut Glass

Illustrations are Reduced Size.

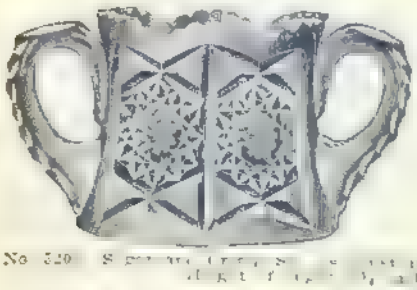
No. 5199 Sugar and Cream Set, as illustrated..... $7.25
Height 2¾ inches

No. 5200 Sugar and Cream Set, as illustrated..... $9.00
Height of sugar [illegible] inches, creamer [illegible] inches

No. 5201 Sugar and Cream Set, as illustrated..... $11.25
Height of sugar [illegible] inches, creamer [illegible] inches



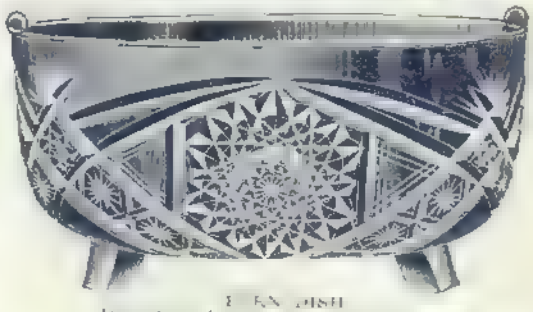
No. 5202 Sugar and Cream Set, as illustrated..... $[illegible]
Height [illegible] inches



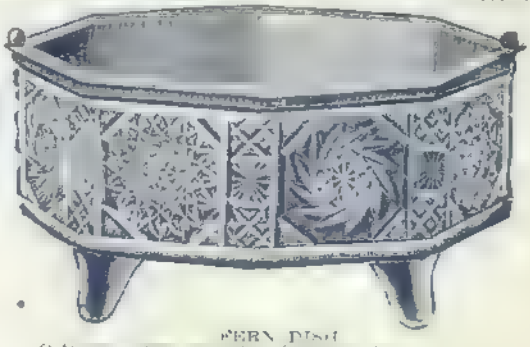
No. 5203 Sugar and Cream Set, as illustrated..... $17.75
Height [illegible] inches, creamer 4¼ inches

No. 5204 Sugar and Cream Set, as illustrated..... $12.50
Height 4¼ inches.

FERN DISH.
Diameter 7 inches, height 4½ inches.
No. 5205 Each..... $14.50
Diameter 8½ inches, height 4½ inches.
No. 5206 Each..... $17.76
Nickel-plated removable metal liner.



FERN DISH.
Diameter 8½ inches, height 4½ inches.
No. 5207 Each..... $14.50
Nickel-plated removable metal liner.



FERN DISH.
Octagon shape, diameter 8½ inches, height 4 inches.
No. 5208 Each..... $20.76
Nickel-plated removable metal liner.

VASE—(Square).
No. 5209 Height 10 inches. Each..... $15.00
No. 5210 Height 12 inches. Each..... 21.25
No. 5211 Height 14 inches. Each..... 3.25

FINEST GENUINE RICH AMERICAN CUT GLASS

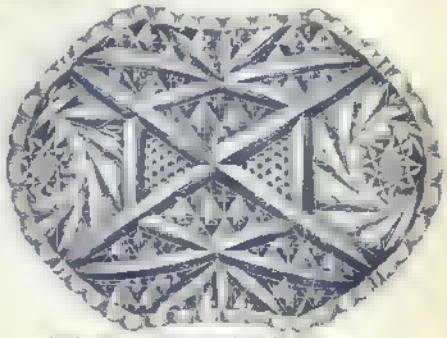
ILLUSTRATIONS ARE REDUCED SIZE

No. 5212 Sugar and Cream Set, as illustrated $5.00
Height 3 inches

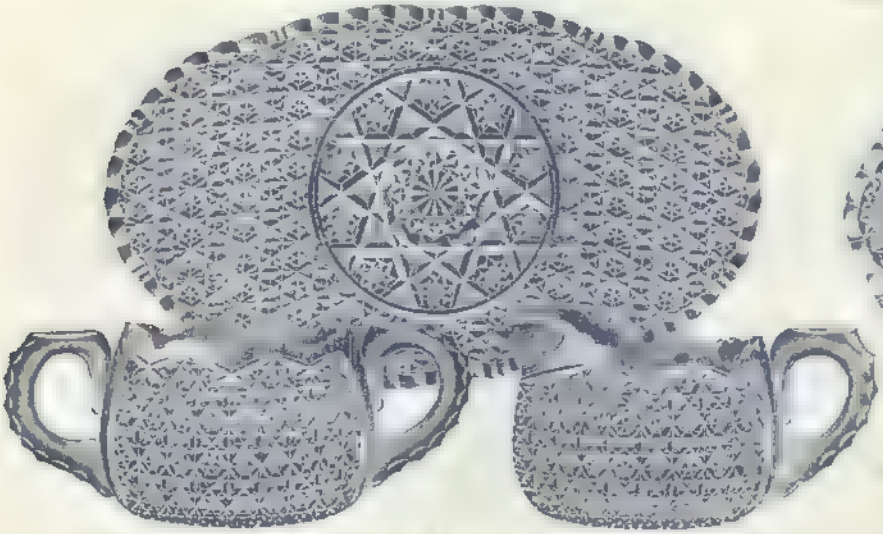
BON BON OR OLIVE DISH
Length, 7 inches; width, 5 inches
No. 5213 Each $5.76

No. 5213 Sugar and Cream Set, as illustrated $5.00
Height of sugar, 3½ inches; height of cream, 3 inches

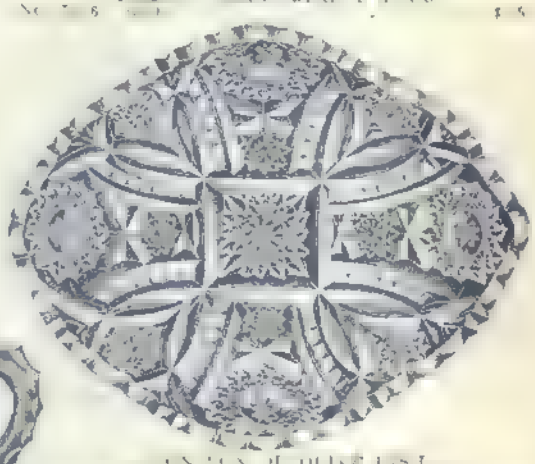
No. 5214 Sugar and Cream Set, as illustrated $5.00
Height 3½ inches



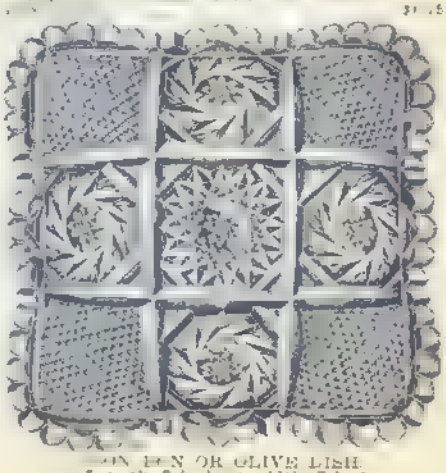
BON BON OR OLIVE DISH
Length, 7 inches; width, 5 inches
No. 5215 Each $3.75



No. 5217 Sugar and Cream Set, as illustrated $5.00
Height of sugar, 4 inches; height of cream, 3½ inches; diameter of tray, 10½ inches

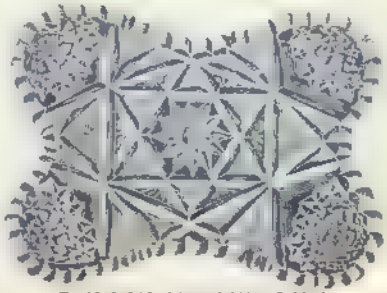


BON BON OR OLIVE DISH
Length, 7 inches; width, 5 inches
No. 5216 Each $3.75



BON BON OR OLIVE DISH
Length, 7 inches; width, 7 inches
No. 5221 Each $5.75

BON BON OR OLIVE DISH
Length, 7 inches; width, 5 inches.
No. 5219 Each $4.50



BON BON OR OLIVE DISH
Length, 6½ inches, width, 4½ inches
No. 5220 Each $5.00

Finest Genuine Rich American Cut Glass

Illustrations are Reduced Size

FOOTED PUNCH BOWL

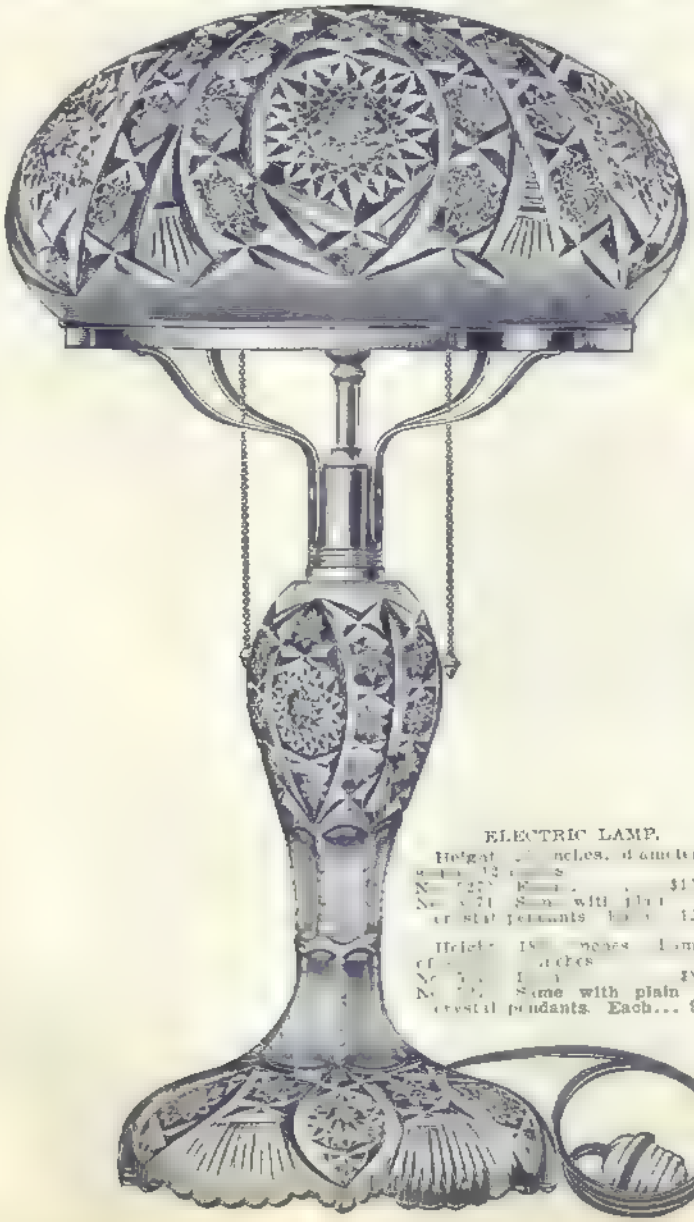
Diameter 11 inches; height 11 inches. Sapphire Compart Foot. Diameter 6 inches.

No. 5267 Each .. $30.00

No. 5264 Diameter [illegible] Each $ 49.00

No. 5265 Diameter [illegible] Each 80.00

No. 5266 Diameter [illegible] Each ... 1.0.00



ELECTRIC LAMP.

Height [illegible] inches, diameter of [illegible]

No. [illegible] Each $11.50

No. [illegible] Same with plain crystal pendants Each 12.50

Height 18 inches. Diameter of [illegible] inches

No. [illegible] Each $8.00

No. [illegible] Same with plain crystal pendants. Each... 91.25

No. 5268 Diameter, 9 inches. Each . . $ 44.50

No. 5269 Diameter, 10 inches. Each 53.50

No. 5270 Diameter 12 inches. Each 66.75

No. 5271 Diameter 14 inches. Each 93.00

No. 5272 Diameter, 16 inches. Each . . 142.25

FOOTED PUNCH BOWL

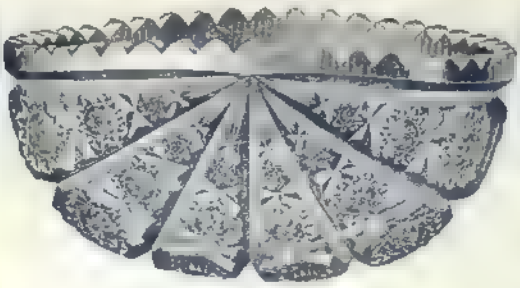
No. 5277 Diameter 12 inches; height 14 inches. Each $10.75

No. 5278 Diameter, 14 inches; height, 15 inches Each $15.75

FINEST GENUINE RICH AMERICAN CUT GLASS

ILLUSTRATIONS ARE REDUCED SIZE

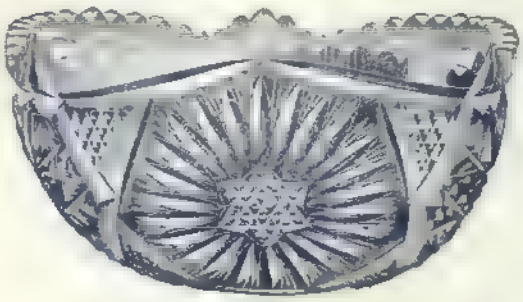
BOWL.
No. 5279 8 inch Each [illegible] $11.25



BOWL.
No. 5280 8 inch Each [illegible] $17.75

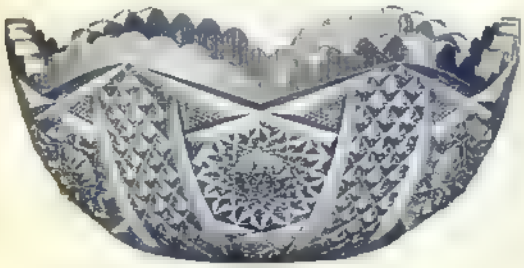
BOWL.
[illegible]
No. 5281 Each [illegible] $4.[illegible]

BOWL.
No. 5282 8 inch Each [illegible] $3.25

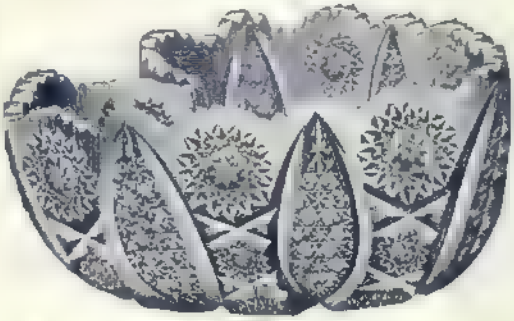


BOWL.
No. 5283 8 inch Each [illegible] $9.00

OIL OR VINEGAR
Height, 7½ inches
No. 5284 Each.....$6.00

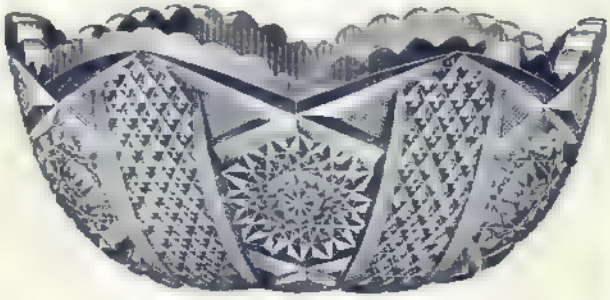


BOWL.
No. 5285 8 inch. Each [illegible] $7.75



BOWL.
No. 5286 9 inch Each [illegible] $12.75

BOWL.
No. 5287 8 inch Each [illegible] $10.00

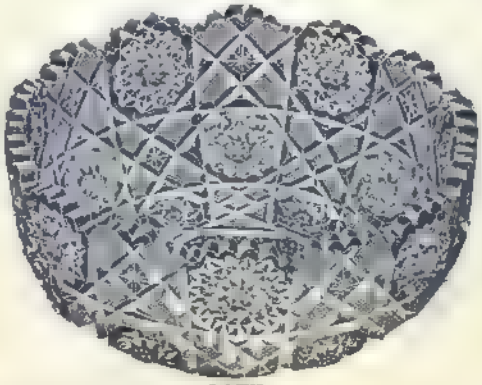


BOWL.
No. 5288 9 inch. Each [illegible] $14.50
No. 5289 10 inch. Each [illegible] 26.75

CANDLESTICK.

		Each
No. 5293	Height, 8 ins	$13.50
No. 5294	Height, 10 ins.	17.75
No. 5295	Height, 12 ins..	22.25
No. 5296	Height, 14 ins..	26.75

BOWL.
No. 5290 8 inch Each [illegible] $11.25



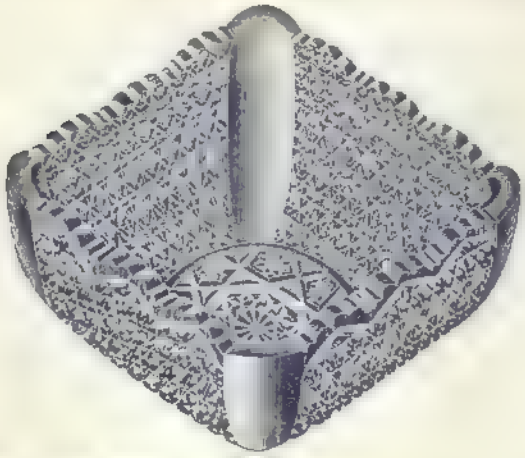
BOWL.
No. 5291 8 inch. Each [illegible] $13.50
No. 5292 9 inch. Each [illegible] 20.00

FINEST GENUINE RICH AMERICAN CUT GLASS

Illustrations Are Reduced Size

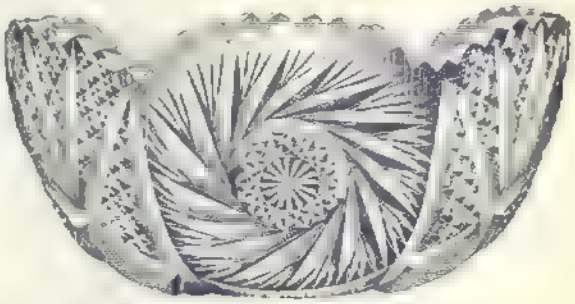
Our prices are strictly rock-bottom, far lower than that of any of our competitors.

In the quality of color, and in the richness and delicacy of carving, upon which the decorative value of glass depends our complete line shows distinctive beauty.



BOWL.

No. [illegible] 8 inch Each [illegible]



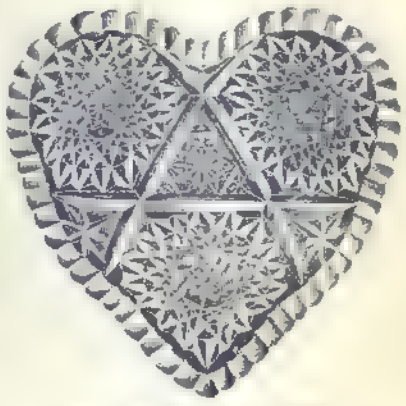
BOWL.

No. 5205 9 inch Each [illegible] $[illegible]

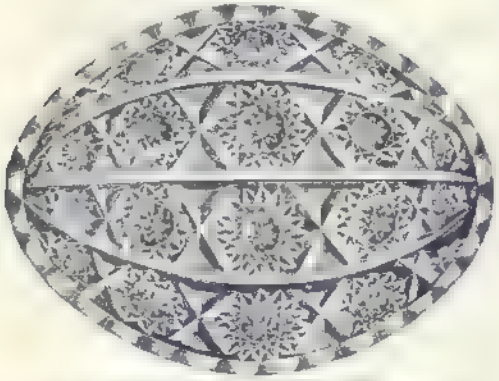
BOWL.

No. 5299 8 inch Each $13.50
No. 5300 10 inch Each 33.50

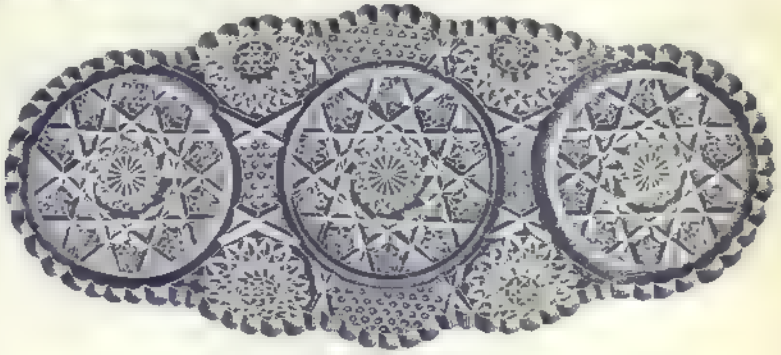
BON BON OR OLIVE DISH
Length [illegible] inches, width [illegible] inches
No. 5301 Each [illegible] $3.00



BON BON OR OLIVE DISH
Length 5¾ inches, width 3½ inches
No. 5302 Each [illegible] $3.00



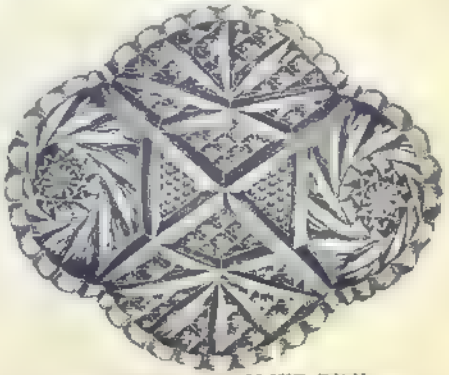
BON BON OR OLIVE DISH
Length, [illegible] inches, width 6 inches, depth 2¾ inches
No. 5304 Each [illegible] $3.00



BREAD TRAY
Length 14 [illegible] inches, width [illegible] inches
No. 5201 Each [illegible] $[illegible]

BON BON OR OLIVE DISH
Length, 7 inches, width, 5½ inches
No. 5305 Each.....$3.50

BON BON OR OLIVE DISH
Diameter 6 inches
No. 5306 Each [illegible] $3.50



BON BON OR OLIVE DISH
Length 7 inches, width 5½ inches
No. 5307 Each [illegible] $3.00

GENTLEMEN'S 18 SIZE 14K SOLID GOLD WATCH CASES

Manufactured by the Keystone Watch Case Co.

Warranted 14k U. S. assay

Stem winding and stem setting.

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Add the price of the MOVEMENT wanted to that of the CASE desired, which will give you the price of the COMPLETE WATCH. When ordering Watches simply quote the NUMBER OF CASE AND MOVEMENT wanted.

We fit all movements to cases and regulate watches before shipping.

All our watches are guaranteed as represented.

FANCY ENGRAVED AND RAISED GOLD ORNAMENTED HUNTING STYLE.

No. K2000 With Diamond $170 00
No. K2001 Without Diamond 152.00

FANCY ENGRAVED AND RAISED GOLD ORNAMENTED HUNTING STYLE.

No. K2002 With Diamond $171 00
No. K2003 Without Diamond ... 153 00

ENGINE TURNED JUERGENSEN STYLE SHIELD CENTER.

No. K2004 Hunting style $98 00
No. K2005 Open Face style 87 00

OPEN FACE STYLE, PATENT DUST PROOF CROWN, SCREW BEZEL, SOLID BACK, SWING RING, PLAIN POLISHED BACK.

No. K2006 Heavy Weight ..... $ 80.00
No. K2007 Extra Heavy Weight ... 104 00

BASCINE PLAIN POLISH BACKS, HUNTING STYLE.

No. K2008 Heavy Weight ... $ 98 00
No. K2009 Extra Heavy Weight 115 00

A fine leatherette silk lined watch box and chamois watch bag furnished free of charge with each complete watch.

BASCINE VERMICELLI CENTER, FINE TOP AND BOTTOM ENGRAVED.

No. K2010 Hunting style $130 00

PLAIN POLISH AND FANCY HAND ENGRAVED.

No. K2011 Hunting style $94 00

FANCY HAND ENGRAVED.

No. K2012 Hunting style $98 00

GENTLEMEN'S 18 SIZE GOLD FILLED WATCH CASES

Stem Winding and Stem Setting—WARRANTED INDEFINITELY. A new case given in exchange. No charge at any time if case shows wear on any part of the case. In other words these cases will last forever.

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Add the price of the MOVEMENT wanted to that of the CASE desired, which will give you the price of the COMPLETE WATCH. When ordering Watches simply quote the NUMBER OF CASE AND MOVEMENT wanted.

No. 2013 Hunting style..... $23.65
No. 2014 Open Face style, screw back and screw bezel..... 23.35
No. 2015 Open Face style, screw bezel, swing ring, solid back..... 24.00

No. 2016 Hunting style..... $29.35
No. 2017 Open Face style, screw back and screw bezel..... 23.40
No. 2018 Open Face style, screw bezel, swing ring, solid back..... 26.10

All cases have solid gold bow, crown joints and thumb-piece.

No. 2019 Hunting style..... $29.35
No. 2020 Open Face style, screw back and screw bezel..... 23.40
No. 2021 Open Face style, screw bezel, swing ring, solid back..... 26.10

No. 2022 Hunting style..... $29.35
No. 2023 Open Face style, screw back and screw bezel..... 23.40
No. 2024 Open Face style, screw bezel, swing ring, solid back..... 26.10

No. 2025 Hunting style..... $29.35
No. 2026 Open Face style, screw back and screw bezel..... 23.40
No. 2027 Open Face style, screw bezel, swing ring, solid back..... 26.10

A Fine Leatherette Silk Lined Watch Box with chamois watch bag furnished free of charge with each complete watch.

No. 2028 Open Face style, screw back and screw bezel..... $23.40
No. 2029 Open Face style, screw bezel, swing ring, solid back..... 26.10

Plain Polish Back.

No. 2030 Open Face style, screw bezel, swing ring, solid back..... $24.00

No. 2031 Open Face style, screw back and screw bezel..... $23.40
No. 2032 Open Face style, screw bezel swing ring, solid back..... 26.10

We fit all movements to cases and regulate watches before shipping.

GENTLEMEN'S 18 SIZE GOLD FILLED WATCH CASES

Stem Winding and Stem Setting, Guarranteed to Wear for 25 Years

No. 2033 Hunting style.. .. .$26 70
No. 2034 Open Face style, screw back and screw bezel.. 21 35
No. 2035 Open Face style, screw bezel, swing ring, solid back 24 00

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We fit all movements to cases and regulate watches before shipping

Plain Polish Back.

No. 2036 Hunting style . $26 70
No. 2037 Open Face style, screw back and screw bezel 21 35
No. 2038 Open Face style, screw bezel, swing ring, solid back 24 00

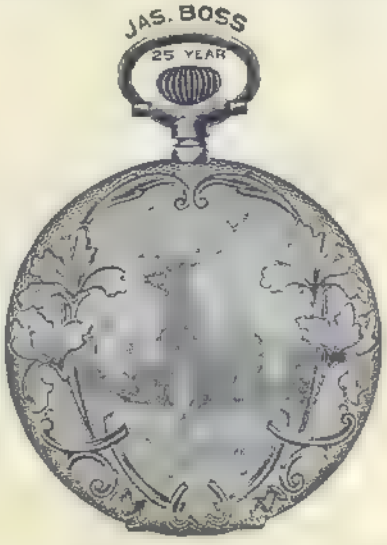
No. 2039 Hunting style.... ...$29 35

No. 2040 Hunting style.....$29.35

No. 2041 Hunting style.. .. . .$29.35

All Cases have Solid Gold Bow, Crown, Joints and Thumb Piece.

No. 2042 Hunting style. $29 35



No. 2043 Hunting style... . . $2 . 35

No. 2044 Hunting style.. . $29 35

A fine leatherette silk lined watch Box and Chanois watch bag furnished free of charge with each complete watch.

GENTLEMEN'S 18 SIZE GOLD FILLED WATCH CASES

Stem Winding and Stem Fitting
Guaranteed to Wear for Twenty-five Years

Prices quoted on this page are for CASES ONLY. For MOVEMENTS or WORKS to fit any of these cases shown on this page, see page 86 to 90 (or Nos. 3372 to 3467), inclusive.

Add the price of the MOVEMENT wanted to that of the CASE desired, which will give you the price of the COMPLETE WATCH. When ordering Watches simply quote the NUMBER OF CASE AND MOVEMENT wanted.

No 2045 Hunting style $28 35
No. 2046 Open Face style, screw back and screw bezel..... 22 35
No. 2047 Open Face style screw bezel, swing ring, solid back.. 26 65

A fine leatherette silk lined watch box with chamois watch bag furnished free of charge with each complete watch.

All have solid gold bow, crown, joints and thumb piece, beautifully and artistically hand engraved and finished.

No 2048 Hunting style $28 35
No 2049 Open Face style, screw back and screw bezel . 22 35
No 2050 Open Face style screw bezel, swing ring solid back 26.65

No. 2051 Hunting style $28.35
No. 2052 Open Face style, screw back and screw bezel 22 35
No. 2053 Open Face style screw bezel, swing ring, solid back.... . . 26.65

No 2054 Hunting style $28 35
No 2055 Open Face style, screw back and screw bezel 22 35
No 2056 Open Face style screw bezel, swing ring solid back 26 65

No 2057 Hunting style $28 35
No 2058 Open Face style, screw back and screw bezel 22.35
No 2059 Open Face style screw bezel, swing ring solid back . . 26 65

No 2060 Hunting style $28 35
No 2061 Open Face style screw back and screw bezel 22 35
No. 2062 Open Face style screw bezel swing ring, solid back 26 65

No 2063 Hunting style $28.35
No 2064 Open Face style, screw back and screw bezel 22 35
No 2065 Open Face style screw bezel swing ring, solid back 26 65

No 2066 Hunting style $28 35
No 2067 Open Face style screw back and screw bezel 22
No 2068 Open Face style screw bezel swing ring solid back 26 65

We fit all movements to cases and regulate watches before shipping.

Gentlemen's 18-Size Gold Filled Watch Cases

Stem Winding and Stem Setting Guaranteed to Wear for 25 Years

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Add the price of the MOVEMENT wanted to that of the CASE desired, which will give you the price of the COMPLETE WATCH. When ordering Watches simply quote the NUMBER OF CASE AND MOVEMENT wanted.

Raised Gold Ornamented.
Hunting style.

No 2069 With diamond . . $62 20
No 2070 Without diamond . . 40 75

We fit all movements to cases and regulate watches before shipping.

Raised Gold Ornamented.
Hunting style.

No. 2071 With diamond . . . $62 20
No 2072 Without diamond . . . 40 75

No 2073 Hunting style $23.35

No. 2074 Hunting style $23.35

No. 2075 Hunting style $23.35

A Fine Leatherette Silk Lined Watch Box with chamois watch bag furnished free of charge with each complete watch.

No. 2076 Hunting style $29.35

No. 2077 Hunting style $29.35

No. 2078 Hunting style $29.35

All cases have solid gold bow, crown, joints and thumb piece.

GENTLEMEN'S 18 SIZE GOLD FILLED WATCH CASES

STEM WINDING AND STEM SETTING
GUARANTEED TO WEAR FOR TWENTY-FIVE YEARS

Prices quoted on this page are for CASES ONLY. For MOVEMENTS or WORKS to fit any of these cases shown on this page, see page 86 to 90 (or Nos. 3372 to 3467), inclusive.

Add the price of the MOVEMENT wanted to that of the CASE desired, which will give you the price of the COMPLETE WATCH. When ordering Watches simply quote the NUMBER OF CASE AND MOVEMENT wanted.

No. 2078 Hunting style $21.95
No. 2080 Open Face style, screw back and screw bezel. 14.65
No. 2081 Open Face style, screw bezel, swing ring, solid back 18.40

We fit all movements to cases and Regulate Watches before shipping

No. 2082 Hunting style ..... $29.
No. 2083 Open Face style, screw back and screw bezel ..... 16.

No. 2084 Hunting style $23.25
No. 2085 Open Face style, screw back and screw bezel 16.00

Plain Polish Back.

No. 2086 Open Face style, screw bezel, swing ring, solid back ... $18.10
No. 2087 Open Face style, screw back and screw bezel 14.65

No. 2088 Hunting style $23.25
No. 2089 Open Face style, screw back and screw bezel 16.00
No. 2090 Open Face style, screw bezel, swing ring, solid back ... 19.40

A Fine Leatherette Silk Lined Watch Box with chamois watch bag furnished free of charge with each complete watch

No. 2091 Open Face style, screw back and screw bezel $16.00
No. 2092 Open Face style, screw bezel, swing ring, solid back 19.40

No. 2093 Open Face style, screw back and screw bezel $16.00
No. 2094 Open Face style, screw bezel, swing ring, solid back 19.40

No. 2095 Open Face style, screw back and screw bezel $16.00
No. 2096 Open Face style, screw bezel, swing ring, solid back..... 19.40

All cases have solid Gold Bow, Crown, Joints and Thumbpiece

Gentlemen's 18 Size Gold Filled Watch Cases

STEM WINDING AND STEM SETTING
GUARANTEED TO WEAR FOR TWENTY-FIVE YEARS

Raised Gold Ornamented, Diamond Set.
No. 2097 Hunting style . . 36

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All cases have solid gold bow crown, joints and thumbpiece A Fine Leatherette Silk Lined Watch Box with chamois watch bag furnished free of charge with each complete watch — We fit all movements to cases and Regulate Watches before shipping

No. 2098 Hunting style . . $23 40
No 2099 Open Face style screw back and screw bezel 16 75
No. 2100 Open Face style, screw bezel, swing ring, solid back . . . 21.35

No 2101 Hunting style $23 40
No 2102 Open Face style screw back and screw bezel 16 75
No. 2103 Open Face style screw bezel, swing ring, solid back . . 21 35

No 2104 Hunting style . . $23 40
No 2105 Open Face style screw back and screw bezel . 16 75
No 2106 Open Face style screw bezel, swing ring, solid back . 21 35

No 2107 Hunting style . . $22 00
No 2108 Open Face style screw back and screw bezel . 15 35
No 2109 Open Face style screw bezel, swing ring solid back . 19 35

No 2110 Hunting style . . . $22 00
No 2111 Open Face style screw back and screw bezel 15 35
No 2112 Open Face style screw bezel, swing ring, solid back 19 35

No 2113 Hunting style . . $22 00
No 2114 Open Face style screw back and screw bezel 15 35
No 2115 Open Face style screw bezel swing ring solid back 19 35

No 2116 Hunting style . . $22 00
No 2117 Open Face style screw back and screw bezel . 15 35
No 2118 Open Face style screw bezel, swing ring solid back 19 35

Gentlemen's 18 Size Gold Filled Watch Cases

Stem winding and stem setting — Guaranteed to wear for twenty-five years

No. 2119 Open Face style, screw back and screw bezel $21 35
No. 2120 Open Face style, screw bezel, swing ring, solid back 24 00

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We fit all movements to cases and Regulate Watches before shipping

No. 2121 Open Face style, screw bezel and screw back $22 40
No. 2122 Open Face style, screw bezel, swing ring, solid back 26 10

A Fine Leatherette Silk Lined Watch Box with chamois watch bag furnished free of charge with each complete watch

All cases have solid gold bow, crowns, joints and thumb pieces

No. 2123 Open Face style, screw back and screw bezel $23 40
No. 2124 Open Face style, screw bezel, swing ring, solid back 26 10

Plain Polish or Roman Finish.

No. 2125 Open Face style, screw back and screw bezel $21 35
No. 2126 Open Face style, screw bezel, swing ring, solid back 24 00

No. 2127 Open Face style, screw back and screw bezel $23 40
No. 2128 Open Face style, screw bezel swing ring, solid back.. ..... 26 10

No. 2129 Open Face style, screw back and screw bezel $23 40
No. 2130 Open Face style, screw bezel, swing ring, solid back 26 10

No. 2131 Open Face style, screw back and screw bezel $23 40
No. 2132 Open Face style, screw bezel, swing ring, solid back 26 10

No. 2133 Open Face style, screw back and screw bezel $23 40
No. 2134 Open Face style, screw bezel swing ring, solid back 26 10

Gentlemen's 18 Size Gold Filled Watch Cases

Stem winding and stem setting
Guaranteed to wear for 25 years

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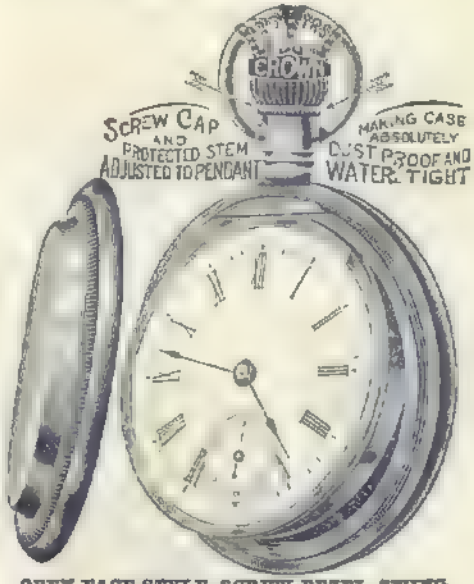
No. 2135 Open Face style, screw back and screw bezel $16.60
No. 2136 Open Face style, screw bezel, swing ring, solid back 21.35

No. 2137 Open Face style, screw back and screw bezel $16.60
No. 2138 Open Face style, screw bezel, swing ring, solid back 21.35

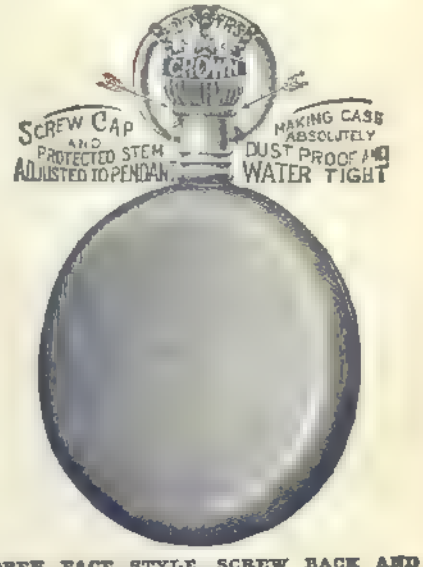
We fit all movements to cases and regulate watches before shipping.

No. 2139 Open Face style, screw back and screw bezel $16.60
No. 2140 Open Face style, screw bezel, swing ring, solid back 21.35



OPEN FACE STYLE, SCREW BEZEL, SWING RING, SOLID BACK.

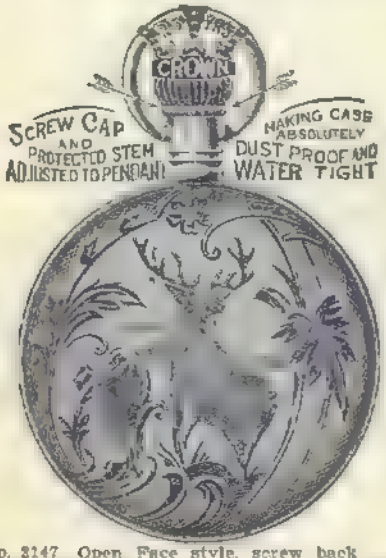
No. 2141 Plain polish back $21.35
No. 2142 Engine turned back 21.35
No. 2143 Fancy engraved back 21.35



OPEN FACE STYLE, SCREW BACK AND SCREW BEZEL.

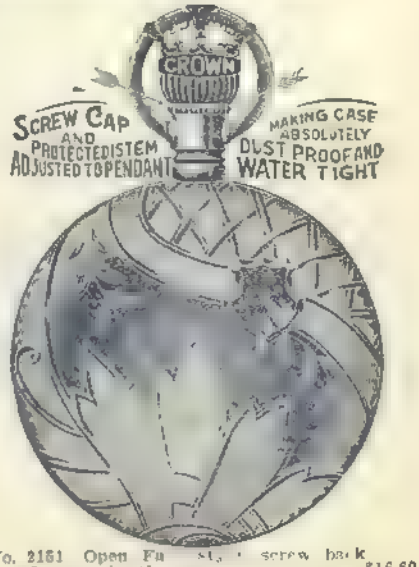
No. 2144 Plain polished back $16.60
No. 2145 Engine turned back 16.60
No. 2146 Fancy engraved back 16.60

A fine leatherette silk lined watch box with chamois watch bag furnished free of charge with each complete watch.



No. 2147 Open Face style, screw back and screw bezel $16.60
No. 2148 Open Face style, screw bezel, swing ring, solid back 21.35

No. 2149 Open Face style, screw back and screw bezel $16.60
No. 2150 Open Face style, screw bezel, swing ring, solid back 21.35



No. 2151 Open Face style, screw back and screw bezel $16.60
No. 2152 Open Face style, screw bezel, swing ring, solid back 21.35

GENTLEMEN'S 18 SIZE GOLD FILLED WATCH CASES

STEM WINDING AND STEM SETTING
GUARANTEED TO WEAR FOR TWENTY YEARS

No. 2153 Hunting style.... $20 [illegible]
No. 2154 Open Face style, screw [illegible] screw bezel [illegible]
No. 2155 Open Face style, screw bezel, swing ring, solid back 18 05

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We fit all movements to cases and Regulate Watches before shipping

Plain Polish or Roman Finish Back.	
No. 2156 Hunting style	$20 76
No. 2157 Open Face style, screw [illegible] screw bezel	14 65
No. 2158 Open Face style, screw bezel swing ring solid back	18 05

No. 2159 Hunting style . . $22 10

No. 2160 Hunting style . . $22 10

No. 2161 Hunting style . . $22 10

A Fine Leatherette Silk Lined Watch Box with chamois watch bag furnished free of charge with each complete watch

No. 2162 Hunting style.....$22 10

No. 2163 Hunting style..... .$22.10

No. 2164 Hunting style.... .....$22 10

GENTLEMEN'S 18 SIZE GOLD FILLED WATCH CASES

STEM WINDING AND STEM SETTING
GUARANTEED TO WEAR FOR TWENTY YEARS

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No. 2165 Hunting style ..... $
No. 2166 Open Face style, screw back and screw bezel 14 75
No. [illegible] Open Face style, screw back, swing ring, solid back ..... [illegible]

We fit all movements to cases and Regulate Watches before shipping

No. 2168 Hunting style $20 50
No. [illegible] Open Face style, screw back and screw bezel 14 75
No. 2170 Open Face style, screw bezel, swing ring, solid back 17 50

No. 2171 Hunting style $20 50
No. [illegible] Open Face style, screw back and screw bezel 14
No. [illegible] Open Face style, screw bezel, swing ring, solid back ..... [illegible]

No. 2174 Hunting style ..... $
No. [illegible] Open Face style, screw back and screw bezel 14 75
No. [illegible] Open Face style, screw bezel, swing ring, solid back 17 50

No. [illegible] Hunting style ..... $
No. [illegible] Open Face style, screw back and screw bezel 14
No. [illegible] Open Face style, screw bezel, swing ring, solid back ..... [illegible]

A Fine Leatherette Silk Lined Watch Box with chamois watch bag furnished free of charge with each complete watch

No. 2180 Hunting style ..... $
No. 2181 Open Face style, screw back and screw bezel ..... [illegible]
No. 2182 Open Face style, screw bezel, swing ring, solid back ..... [illegible]

No. [illegible] Hunting style ..... $
No. [illegible] Open Face style, screw back and screw bezel 14
No. 2185 Open Face style, screw bezel, swing ring, solid back 17 50

No. 2186 Hunting style ..... $
No. 2187 Open Face style, screw back and screw bezel 14
No. 2188 Open Face style, screw bezel, swing ring, solid back 17 50

GENTLEMEN'S 18 SIZE GOLD FILLED WATCH CASES

Guaranteed to wear for 20 years.

Stem winding and stem setting.

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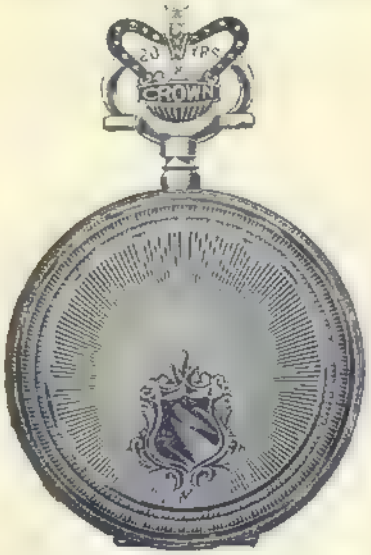
All Movements fitted to Cases and Watches Regulated before shipping.



No. 2189 Hunting style $17.35
No. 2190 Open face style screw back and screw bezel .. 12.00

PLAIN POLISH BACKS.

No. 2191 Hunting style $17.35
No. 2192 Open face style screw back and screw bezel 12.00

No. 2193 Hunting style $17.35
No. 2194 Open face style, screw back and screw bezel 12.00

No. 2195 Hunting style $17.35
No. 2196 Open face style screw back and screw bezel 12.00

No. 2197 Hunting style $17.35
No. 2198 Open face style screw back and screw bezel 12.00

No. 2199 Hunting style $17.35
No. 2200 Open face style screw back and screw bezel... 12.00

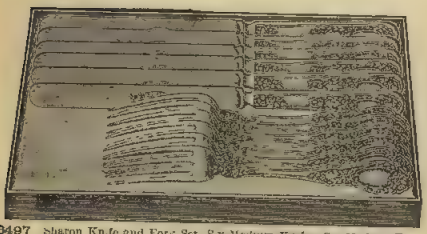
No. 2201 Hunting style $17.35
No. 2202 Open face style, screw back and screw bezel..... 12.00

No. 2203 Hunting style $17.35
No. 2204 Open face style screw back and screw bezel. 12.00

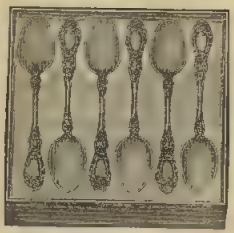
A Fine Leatherette Silk Lined Watch Box with Chamois Watch Bag Furnished Free of Charge with Each Complete Watch.

The Sharon Pattern

French Grey Handle, Polished Bowl and Shield.



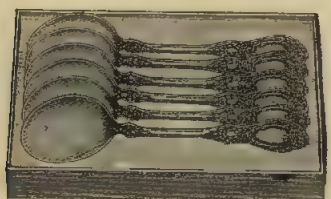
6497 Sharon Knife and Fork Set, Six Medium Knives, Six Medium Forks, **$11 50** per set.



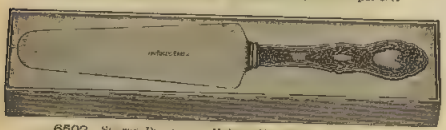
6498 Sharon Coffee Spoons, Six in Lined Box, **$3 25** per set.

6499 Sharon Bouillon Spoons, Six in Lined Box, **$6 00** per set.

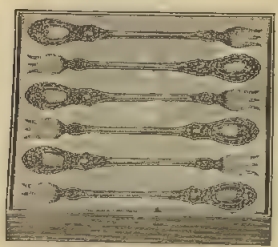
6500 Sharon Orange Spoons, Six in Lined Box, **$4 05** per set.



6501 Sharon Soup Spoons, Six in Lined Box, **$6 50** per set.



6502 Sharon Pie Server, Hollow Handle, **$4 00** each.



6503 Sharon Oyster Forks, Six in Lined Box **$4 50** per set.

Our Constant Aim is to Keep Values Up and Prices Down.

"THE HOUSE OF QUALITY"

SPOONS, FORKS, ETC. STAMPED

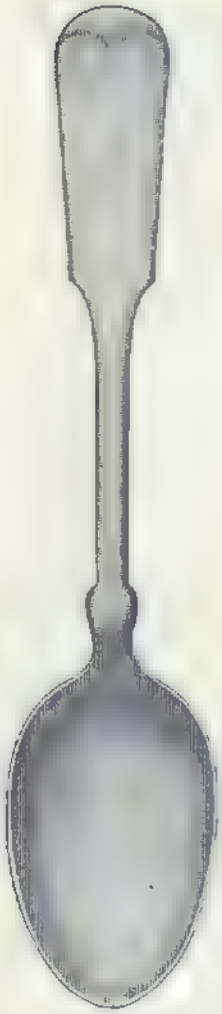
1847 ROGERS BROS. XS TRIPLE

ARE GENUINE "ROGERS" GOODS.

FINE SILVER PLATED FLATWARE

XS Triple Plate and XS Quintuple Plate on 21 per cent Nickel Silver.

Cuts show size of Tea Spoons.



TIPPED PATTERN

Tea Spoons

No.		Per doz.
1419	XS Triple plate	$8.12
1420	XS Quintuple "	8.64

Dessert Spoons

1421	XS Triple plate	$10.80
1422	XS Quintuple "	14.40

Table Spoons

1423	XS Triple plate	$12.24
1424	XS Quintuple "	17.28

Dessert Forks

1425	XS Triple plate	$10.80
1426	XS Quintuple "	14.40

Medium Forks

1427	XS Triple plate	$12.24
1428	XS Quintuple "	17.28

FANCY PIECES NOT MADE IN TIPPED PATTERN

PRISCILLA PATTERN

Tea Spoons

No.		Per doz.
1429	XS Triple plate	$6.84
1430	XS Quintuple "	9.36

Dessert Spoons

1431	XS Triple plate	$12.24
1432	XS Quintuple "	15.84

Table Spoons

1433	XS Triple plate	$13.68
1434	XS Quintuple "	18.72

Dessert Forks

1435	XS Triple plate	$12.24
1436	XS Quintuple "	15.84

Medium Forks

1437	XS Triple plate	$13.68
1438	XS Quintuple "	18.72

Sugar Shells

		Each
1439	XS Triple plate	$1.08

Butter Knives

1440	XS Triple plate	$1.26

WINDSOR PATTERN

Tea Spoons

No.		Per doz.
1441	XS Triple plate	$6.12
1442	XS Quintuple "	8.64

Dessert Spoons

1443	XS Triple plate	$10.80
1444	XS Quintuple "	14.40

Table Spoons

1445	XS Triple plate	$12.24
1446	XS Quintuple "	17.28

Dessert Forks

1447	XS Triple plate	$10.80
1448	XS Quintuple "	14.40

Medium Forks

1449	XS Triple plate	$12.24
1450	XS Quintuple "	17.28

FANCY PIECES NOT MADE IN WINDSOR PATTERN

SHELL PATTERN

Tea Spoons

No.		Per doz.
1451	XS Triple plate	$6.12
1452	XS Quintuple "	8.64

Dessert Spoons

1453	XS Triple plate	$10.80
1454	XS Quintuple "	14.40

Table Spoons

1455	XS Triple plate	$12.24
1456	XS Quintuple "	17.28

Dessert Forks

1457	XS Triple plate	$10.80
1458	XS Quintuple "	14.40

Medium Forks

1459	XS Triple plate	$12.24
1460	XS Quintuple "	17.28

FANCY PIECES NOT MADE IN SHELL PATTERN

FANEUIL FRENCH GRAY PATTERN

Tea Spoons

No.		Per doz.
1461	XS Triple plate	$6.84
1462	XS Quintuple "	9.36

Dessert Spoons

1463	XS Triple plate	$12.24
1464	XS Quintuple "	15.84

Table Spoons

1465	XS Triple plate	$13.68
1466	XS Quintuple "	18.72

Dessert Forks

1467	XS Triple plate	$12.24
1468	XS Quintuple "	15.84

Medium Forks

1469	XS Triple plate	$13.68
1470	XS Quintuple "	18.72

Sugar Shells

		Each
1471	XS Triple plate	$1.08

Butter Knives

1472	XS Triple plate	$1.26

SPOONS, FORKS, ETC. STAMPED

1847 ROGERS BROS. XS TRIPLE

ARE GENUINE "ROGERS" GOODS.

Fine Silver Plated Flatware

XS Triple Plate and XS Quintuple Plate on 21 Per Cent Nickel Silver

SHARON FRENCH GRAY PATTERN

No.	Tea Spoons	Doz
1473	XS Triple plate	$6 84
1474	XS Quintuple "	9 36
	Dessert Spoons	
1475	XS Triple plate	$12 24
1476	XS Quintuple "	15 84
	Table Spoons	
1477	XS Triple plate	$13 68
1478	XS Quintuple "	18 72
	Dessert Forks	
1479	XS Triple plate	$12 24
1480	XS Quintuple "	15 84
	Medium Forks	
1481	XS Triple plate	$13 68
1482	XS Quintuple "	18 72
	Sugar Shells	Each
1483	XS Triple plate	$1 08
	Butter Knives	
1484	XS Triple plate	$1 26

VINTAGE FRENCH GRAY PATTERN

No.	Tea Spoons	Doz
1485	XS Triple plate	$6 84
1486	XS Quintuple "	9 36
	Dessert Spoons	
1487	XS Triple plate	$12 24
1488	XS Quintuple "	15 84
	Table Spoons	
1489	XS Triple plate	$13 68
1490	XS Quintuple "	18 72
	Dessert Forks	
1491	XS Triple plate	$12 24
1492	XS Quintuple "	15 84
	Medium Forks	
1493	XS Triple plate	$13 68
1494	XS Quintuple "	18 72
	Sugar Shells	Each
1495	XS Triple plate	$1 08
	Butter Knives	
1496	XS Triple plate	$1 26

COLUMBIA PATTERN

No.	Tea Spoons	Doz
1497	XS Triple plate	$6 84
1498	XS Quintuple "	9 36
	Dessert Spoons	
1499	XS Triple plate	$12 24
1500	XS Quintuple "	15 84
	Table Spoons	
1501	XS Triple plate	$13 68
1502	XS Quintuple "	18 72
	Dessert Forks	
1503	XS Triple plate	$12 24
1504	XS Quintuple "	15 84
	Medium Forks	
1505	XS Triple plate	$13 68
1506	XS Quintuple "	18 72
	Sugar Shells	Each
1507	XS Triple plate	$1 08
	Butter Knives	
1508	XS Triple plate	$1 26

AVON PATTERN

No.	Tea Spoons	Doz
1509	XS Triple plate	$6 84
1510	XS Quintuple "	9 36
	Dessert Spoons	
1511	XS Triple plate	$12 24
1512	XS Quintuple "	15 84
	Table Spoons	
1513	XS Triple plate	$13 68
1514	XS Quintuple "	18 72
	Dessert Forks	
1515	XS Triple plate	$12 24
1516	XS Quintuple "	15 84
	Medium Forks	
1517	XS Triple plate	$13 68
1518	XS Quintuple "	18 72
	Sugar Shells	Each
1519	XS Triple plate	$1 08
	Butter Knives	
1520	XS Triple plate	$1 26

BERKSHIRE PATTERN

No.	Tea Spoons	Doz
1521	XS Triple plate	$6 84
1522	XS Quintuple "	9 36
	Dessert Spoons	
1523	XS Triple plate	$12 24
1524	XS Quintuple "	15 84
	Table Spoons	
1525	XS Triple plate	$13 68
1526	XS Quintuple "	18 72
	Dessert Forks	
1527	XS Triple plate	$12 24
1528	XS Quintuple "	15 84
	Medium Forks	
1529	XS Triple plate	$13 68
1530	XS Quintuple "	18 72
	Sugar Shells	Each
1531	XS Triple plate	$1 08
	Butter Knives	
1532	XS Triple plate	$1 26

CHARTER OAK FRENCH GRAY PATTERN

No.	Tea Spoons	Doz
1533	XS Triple plate	$6 84
1534	XS Quintuple "	9 36
	Dessert Spoons	
1535	XS Triple plate	$12 24
1536	XS Quintuple "	15 84
	Table Spoons	
1537	XS Triple plate	$13 68
1538	XS Quintuple "	18 72
	Dessert Forks	
1539	XS Triple plate	$12 24
1540	XS Quintuple "	15 84
	Medium Forks	
1541	XS Triple plate	$13 68
1542	XS Quintuple "	18 72
	Sugar Shells	Each
1543	XS Triple plate	$1 08
	Butter Knives	
1544	XS Triple plate	$1 26

Jacox
STEERING GEAR

Many a car has obtained the reputation of being "cranky" or hard to handle because continuous service had worn the steering gear in one spot and made the car unresponsive to the driver's guidance.

Jacox Gears are constructed upon principles which absolutely insure uniformity of wear upon the entire gear surface, no matter how long they are in service.

Our Engineering Department will be pleased to furnish to any motor-car manufacturer either a sample gear for experiment or blue prints for a specially designed gear, as requested.

THE JACKSON-CHURCH-WILCOX CO.
Department B. SAGINAW, MICH.

"AC"

This Name Stands for Efficiency in

SPARK PLUGS

Used as standard equipment by seventy-four prominent manufacturers

CHAMPION IGNITION COMPANY Flint, Mich.

THE HIGHEST GRADE
4 and 6 Cylinder, 4 Cyle

Water-Cooled Motors

for

Automobiles and Commercial Cars

Self-contained oiling system with shaft-driven gear pump cares for all moving parts. Magneto mounted on integral crank shaft bracket. Cam shaft removable as a unit through the end of the case. Cylinders of T-head type, cast in triple units in the 6 cylinder model with ample water jackets. Two sets of plugs, one in the head and the other in the side over the inlet valves.

Large bearing surfaces, long push-rod guides are significant of the substantial construction of every part of these motors, even to the smallest detail.

May we quote on your requirements?

Herschell-Spillman Co.
North Tonawanda, New York

WE'VE GOT IT!!!

REX VELVET NICKEL POLISH
(Another Rex Dependable)

FILLS THAT VACANCY
That always existed

IN THE POLISH LINE

BECAUSE
ordinary polish for General Use is not sufficiently

DELICATE and PROTECTIVE

Performs the two-fold operation of cleaning both the plating and the glass on

NICKEL PLATED LAMPS, WIND-SHIELDS
MIRRORS, GERMAN SILVER REFLECTORS
and all Silver, Nickeled and German Silver Accessories

PERFECT FOR ITS FINE PURPOSE
RETAIL PRICE 50 CTS. BOX

Made by the Makers of the Ever Dependable
REX METAL CREAM, REX WOOD OIL and REX LEATHER DRESSING

ARMIGER CHEMICAL COMPANY
2165-67 Austin Ave. Chicago, Ill.

Harness Free Air with a "W-A" Air Compressor

and make it work for you Inflating Tires, Blowing out Motors and Cylinders, Cleaning Upholstery, Cleaning out Water, Feed and Exhaust Pipes, etc. Sold under the "Money Back if not entirely satisfied" Guarantee.

Write for full particulars and special introductory prices today

F. S. Austin Machinery Company, 29-31 No. Jefferson Street, Chicago

Allen-Friction Wrench Set

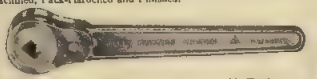
HAS THE

ALLEN-FRICTION SOCKET WRENCH

PATENTED

The Wrench With the Instantaneous Grip

Made from the Best Drop Forged High Carbon Steel Carefully Machined, Pack-Hardened and Finished.



It is Not a Ratchet Wrench
Simple, Efficient & Durable
Mechanically Correct
Reversible

It has No Teeth
No Springs
No Lost Motion
Instantaneous Grip

It will Work Faster than a Ratchet
Work in smaller space than a Ratchet
Do More Work than a Ratchet
Not Mutilate the Nut

ALLEN WRENCH & TOOL CO.
PROVIDENCE, R. I.

Stop That Oil Waste

ON FORD CARS

Pedersen Lubricator eliminates all oil waste and properly lubricates your motor. Prevents carbonization of spark plugs, cylinders, exhaust pipe and muffler.

This system lubricates according to the speed of your engine, thereby insuring the proper amount of oil—not too much or too little. Maintains a constant level in your crank case. Sight feed on dash, needs no attention—just fill up tank and forget your oil troubles. Pays for itself over and over again.

One man runs 197 miles on one quart, read his letter:—

Tel. 906-R. Mount Vernon, N Y., July 22, 1912
The Pedersen Lubricator Co.
Gentlemen—
Your favor of the 17th inst. to hand and will say I am using two Ford cars and have your Ford oiler on each one. You have cut my oil bill in two, only last Saturday to Sunday I drove to Trenton, N. J., returning Sunday, I used 1 qt. oil and 7½ gal. gas. I drove exactly 197 miles. You have sold several oilers through my recommendation and will sell more.
Yours truly,
(Signed) A. BLAU

Write or ask your dealer.

PEDERSEN LUBRICATOR CO.
636 First Avenue New York, U. S. A.

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Cementless Patch Rubber Cement Vulcanizing Cement
and other rubber products. Write for the latest catalogue of

LIBERTY RUBBER COMPANY, WEST ORANGE, N. J.

THE AUTOMOBILE TRADE JOURNAL
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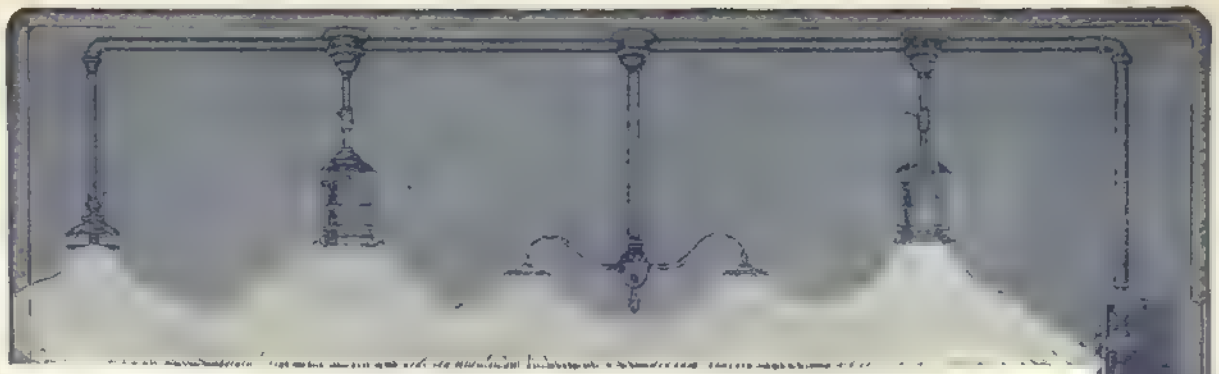
IS THE LARGEST AND MOST COMPLETE AUTOMOBILE TRADE PUBLICATION IN THE WORLD. THE SUBSCRIPTION PRICE IS $2.00 A YEAR.

SAMPLE COPY SENT ON REQUEST



No. 53 Price... $8.40
500 Candle Power.

No. 57 Price...$16.80
1000 Candle Power

No. 102 Price ..$16.80
1000 Candle Power.

No. 58 Price...$11 20
500 Candle Power

The Acme Lighting System Installed

Permitted by the National Board of Fire Underwriters

The Acme Airlight Gas System is so named because it burns 96% air to 4% gasoline gas. It is an independent gas plant in itself, in which all the gas is made at one central point, the Generator, and piped through galvanized steel pipe to the lamps, where it is lighted with a match the same as city gas. The tank containing gasoline can be placed out of doors or any place to be convenient. It is attached to the Generator by one-eighth inch hollow wire, which conveys the gasoline to the Generator; as the Generator is generally placed just inside the back wall of the building, there is never any gasoline in the building and thus all danger is eliminated.

No. 101
500 Candle Power.
Price $8 15

CONSTRUCTION.

The Acme Generator, as well as the entire system and equipment is made of the very best material obtainable, is absolutely non-leakable and non-carbonizing. The Generator is so constructed that it is practically one piece, and yet it can be taken apart easily and new parts put in when necessary.

ECONOMY.

The Acme Airlight Gas System will supply better gas and better light for any place than any other system or method of lighting. It utilizes every atom of the light giving properties of gasoline and uses a larger percentage of air than other generators owing to the fact that combustion in this Generator is absolutely perfect. One 500 C. P. Airlight mantle on this system will burn 35 to 50 hours on one gallon of gasoline. Five 500 C. P. mantles will light a room 20 feet wide and 50 to 100 feet long, four hours a night, twenty six nights a month, for $1.82 with gasoline at 15 cents per gallon.

Electricity at the prevailing rates would cost for the same time and same amount of light, using enclosed arc lamps of 500 C. P. each, $20 80 at 1c per kilowatt. Gas at $1.00 per thousand feet, using gas arcs, would cost $18.20 for the same time and same candle power. Besides economy, many other points are in favor of the Solar Gas system. The quality of light is much better, cloths and colors can be matched under it the same as by daylight. It does not vitiate the air as gas is not a narcotic and therefore is non-asphyxiating. There are no deadly live wires around to endanger life. In fact there is every reason why an up-to-date merchant should have this system and not one legitimate objection can be advanced against it.

No. 57 1000 Candle Power Inside Lamp
Price $16.80

PRICE LIST.

The systems on which we quote prices as given below consist of 2 lamps, generator, 6-gallon tank and equipment, 40 feet service pipe and fittings.

No. 101	System complete with 2 No. 101 lamps	$ 87.35
No. 101	Each additional lamp and 20 feet pipe with connections to add to above system	15.20
No. 101	Lamp only (1 mantle)	8.15
No. 58	System complete with 2 No. 58 lamps	93.50
No. 58	Each additional lamp and 20 feet pipe and connections to add to above system	18 30
No. 58	Lamp only (1 mantle)	11 20
No. 102	System complete with 2 No. 102 lamps	104.70
No. 102	Each additional lamp and 20 feet pipe with connections to add to above	23 90
No. 102	Lamp only	16 80
No. 57	System complete with 2 No. 57 lamps	104 70
No. 57	Each additional lamp and 20 feet pipe with connections	23.90
No. 57	Lamp only	16 80
No. 58	System complete with 2 No. 58 3-mantle lamps	104 70
No. 58	System complete with 2 No. 58 2-mantle lamps	93 55
No. 53	System complete with 2 No. 53 lamps	87 90
No. 58	1 No. 560 outside lamp and 20 feet pipe to add to any of above systems	32.30
No. 56	Lamp only	24 00

To estimate the cost of larger plants add $7.10 for 20 feet pipe and connections to the price of lamp desired.

For the EXACT Cost, send us a diagram of room to be lighted, showing location of lamps and measurements that can be given, style of light desired, and we will be pleased to quote you price on the complete plant.

No. 56 1000 Candle Power Outside Air Light System Fixture
Price $24 60

THE NULITE SYSTEM OF GASOLINE LIGHTING

Did you ever stop to consider the advantages of a well lighted store? It is the best and cheapest advertisement

GENERATOR TUBE AND COPPER CABLE
Used on 6 and 6A System Lamps.

Tip and gauze of FOUR-PIECE GENERATOR used on 6 and 6A System Lamps. Easy to clean.

OUR GUARANTEE

We hereby guarantee to repair or replace any imperfections in material or construction that may develope in our System Lights for one year from date of sale, provided the part or parts claimed to be defective are returned to us for inspection, transportation charges prepaid, before claim will be allowed. We do not guarantee mantles or glassware.

NULITE INDOOR SYSTEM No. 6.

NULITE HOLLOW WIRE SYSTEMS AND VAPOR GAS

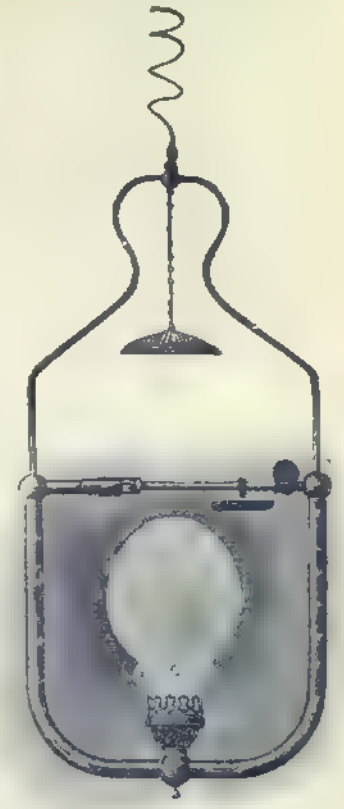
The Nulite Hollow Wire Lighting Systems and Lamps are the oldest and most reliable in use. We have thousands of testimonials from satisfied customers as to their efficiency. Nothing but the very very best material is used in their construction and the workmen employed in our factory are experts in their line, having had years of experience in manufacturing gasoline lights and appliances.

This line includes lamps and systems for absolutely every purpose. Stores, Halls, Churches, Hotels, Dwellings, Streets, Lawns, Parks etc.

There are about 200 000 Nulite systems in use at the present time in all parts of the world, many of them having been in constant service for ten to twelve years. Such a record is surely sufficient to excite your interest at least, and we would ask nothing better than an opportunity to show you that these statements are absolutely true.

We guarantee our systems and lamps to be as represented and our knowledge of the material used in their construction justifies us in doing so.

With this system 600 Candle Power is produced from one mantle at thirty hours per gallon or about one-half cent per hour.



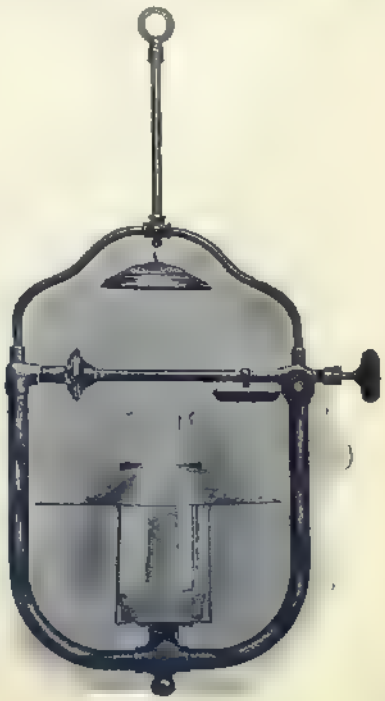
NULITE INDOOR SYSTEM No. 6A.

We furnish with each complete System all necessary glassware, mantles, wrench, alcohol can, tank, pump, twenty-five feet of hollow wire, etc. One to six lamps of 600 candle power each can be operated individually or in series with a five gallon tank, and one to twelve lamps on a ten gallon tank. By furnishing us with a diagram showing the manner in which you intend installing the plant, giving the height of ceiling, distance between lamps, drop of each lamp from main feed line we will make all connections at factory, numbering each piece to correspond with number on diagram, which we will return to you, thus making the installing of the System very simple.

No. 6 or 6A Indoor Nulite Lighting System, complete with 5 gallon tank, 25 ft. hollow wire and connections	$32.00
No. 42 Indoor Lighting System, complete with 5 gallon tank, 25 ft. hollow wire and connections	33.35
No. 43 Outdoor Lighting System, complete with 5 gallon tank, 25 ft. hollow wire and connections	37.35
No. 6 or 6A Indoor Nulite Lighting System Lamp, complete with glassware and mantle	10 00
No. 42 Indoor Lighting System Lamp, complete with glassware and mantle	11.35
No. 43 Outdoor Lighting System Lamp, complete with glassware and mantle	18.00
No. 2 or -inch Hollow Wire, per foot	.03
"T" Connections, each	.70
4-Way "T" Connections, each	1.00
10 Gallon System Tank, only complete with gauge and pump	26.70
5 Gallon System Tank, only complete with gauge and pump	22.70

No. 43—OUTDOOR SYSTEM.

STEEL TANK FURNISHED ON SYSTEMS.



INDOOR SYSTEM No. 42.

AMERICAN ENCLOSED ARC LAMPS

GENERAL DESCRIPTION

110 Volt Lamp—Adjustment from 100 to 150 Volts; 4½ to 5½ Amperes, 78 to 80 Volts at arc. Carbon life, 150 to 200 hours.

220 Volt Lamp—Adjustment from 200 to 250 Volts; 2½ to 3½ Amperes; 140 Volts at the arc. Carbon life 200 to 240 hours.

FEATURES

Length 22 inches.
Carbons ½x12 in. Solid.
Indestructible Coils.
Accessible Parts.
Lowest Maintenance Cost.
Standard Glassware.

SHOP LAMP

Improved Standard, Direct Current, Multiple Shop Lamp, with 18-inch Steel Porcelain Enameled Shade

Guarantee—Every Lamp Guaranteed to be Free from inherent Mechanical and Electrical Defects.

Shop Lamps—Cast Iron Covers, Plain Black Japan Finish. Exposed Parts Polished Nickel.

Store and Office Lamps—Spun Brass Covers; Brushed Brass or Oxidized Copper Finish.

Outdoor Lamps—Spun Copper Covers, Plain Black or Oxidized Fin-

Swinging Covers—All Lamps are equipped with the "Northall" Swinging Covers, which permit ready access to Interior Mechanism.

SHOP LAMPS

No. 486A—

	Each
110 Volt, with Outer Globe or Porcelain Shade.....	$26 00

No. 486B—

220 Volt, with Outer Globe or Porcelain Shade.	26 60

Add $1 00 to List Price when Steel-Porcelain Shade is ordered.

STORE AND OFFICE LAMPS

No. 486C—

	Each
110 Volt, with Outer Globe or Porcelain Shade.....	$28 0

No. 486D—

220 Volt, with Outer Globe or Porcelain Shade.. .	28 60

Add $1.00 to List Price when Steel-Porcelain Shade is wanted.

In ordering specify whether Brushed Brass or Oxidized Copper Finish.

OUTDOOR LAMPS

No. 486E—

	Each
110 Volt, with Outer Globe or Porcelain Shade ..	$29 00

No. 486G—

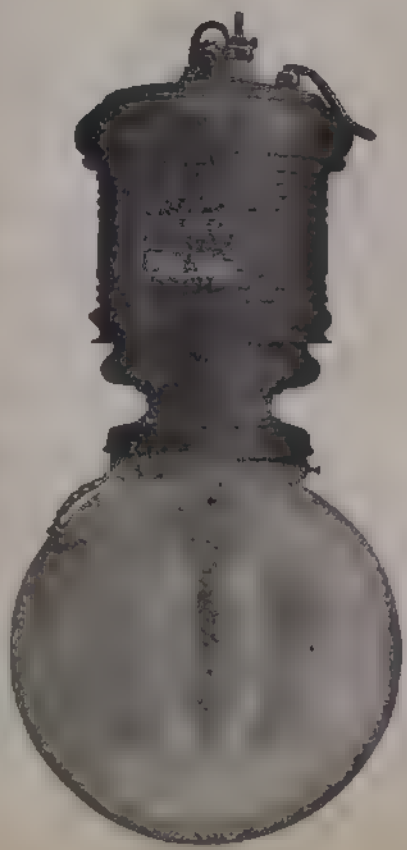
220 Volt, with Outer Globe or Porcelain Shade.....	29 60

Add $1 00 to List Price when Steel-Porcelain Shade is ordered.

In ordering specify whether Plain Black or Oxidized Copper Finish.

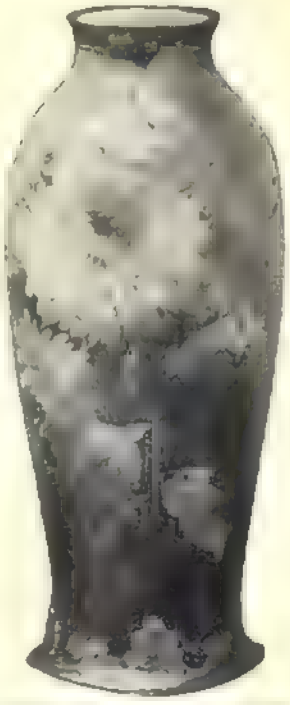
STORE AND OFFICE LAMPS

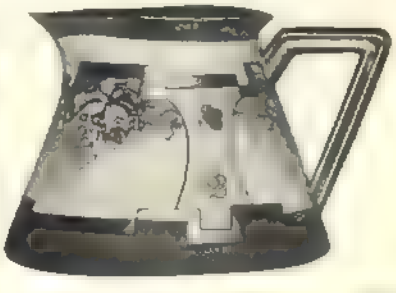
Improved Standard Direct Current Multiple Store and Office Lamp, with Opalescent Outer Globe



OUTDOOR LAMP

Improved Standard Direct Current Multiple Outdoor Lamp, with Clear Outer Globe

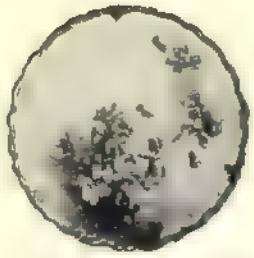


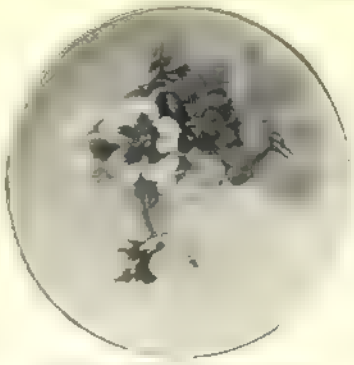


REAL AMERICAN HAND PAINTED CHINA

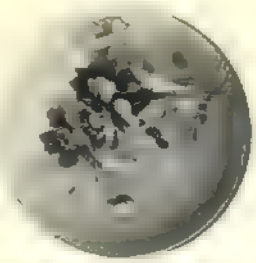
Prices Each

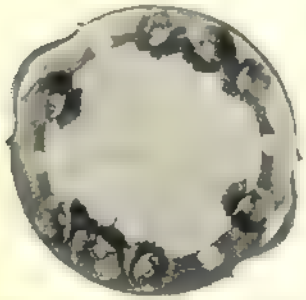
Real American free-hand painting (not stenciled or printed) on first quality white French China. All pieces are edged with heavy gold borders

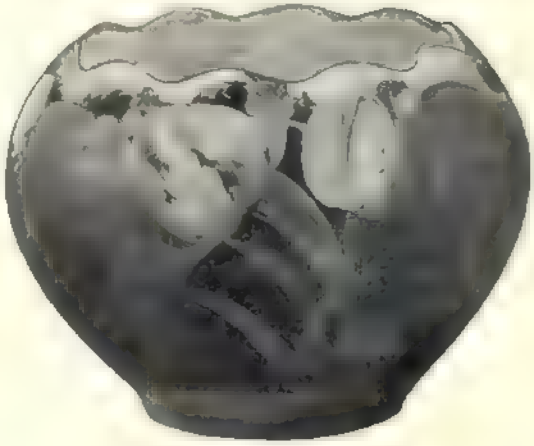




Diameter, 8¼ in. No. [illegible]

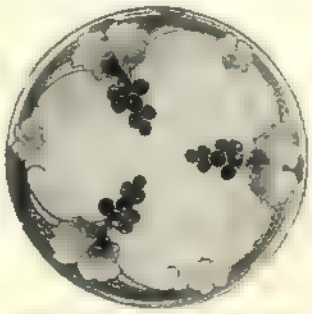


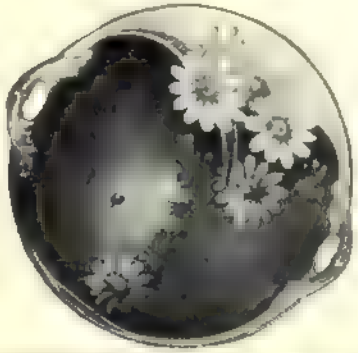


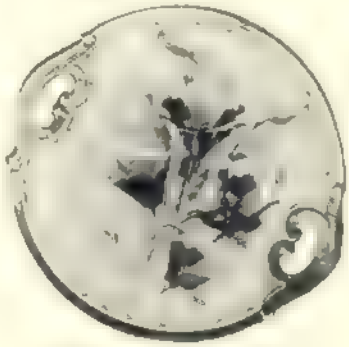


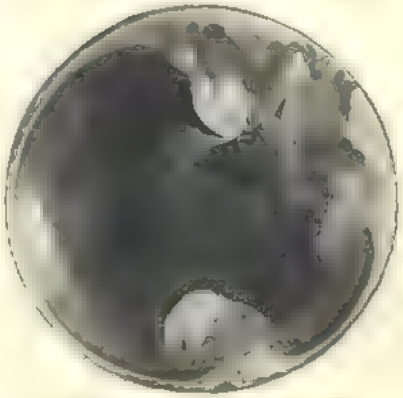
Jardiniere—Tulips, Rich Background
Diameter, 7 in. Height, 7 in. No. 805 S250

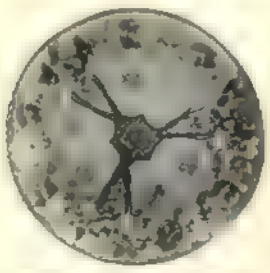
Pink Roses	Pink Blossoms
Red Roses	Violets
Iris	Poppies
Tulip	Daisy
Wild Roses	Lilacs
Pansies	Pomegranate

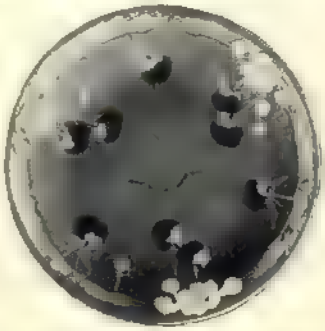


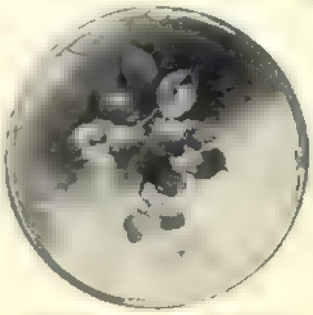












GUITARS

No. 91249 Birch back and sides, enlarged model, rosewood finish, imitation mahogany neck, walnut finger-board, pearl position dots, inlaid sound-hole, strung with steel strings, broad strip down center of back.....Each $ 7.00
No. 91259 Concert size, same description as 91249.....Each 8.25
No. 91250 Birch back and sides, enlarged model, mahogany finish, imitation mahogany neck, walnut finger-board, pearl position dots, inlaid sound-hole, nickel-plated tail piece, fancy colored wide stripe on back, strung with steel strings .....Each 7.00
No. 91252 Birch back and sides, enlarged model, imitation rosewood finish, mahogany finish neck, walnut finger-board, pearl position dots, inlaid sound-hole, celluloid bound edge, fancy colored stripe on back, nickel-plated tail piece, strung with steel strings.....Each 8.25
No. 91262 Concert size, same description as 91252.....Each 9.75
No. 91253 Antique oak back and sides, enlarged model, rubbed finish, imitation mahogany neck, rosewood finger-board, pearl position dots, inlaid sound-hole, fancy colored wood stripe in back, nickel-plated tail piece, strung with steel strings.....Each 9.75
No. 91255 Fine imitation rosewood finish, back and front edges neatly bound with celluloid, fancy colored wood inlaying around sound hole and edges and down center of back, ebonized finger-board, pearl position dots, brass patent heads, metal tail piece, steel strings.....Each 11.25
No. 91265 Concert size, same description as 91255.....Each 12.75
No. 91256 Solid mahogany, dark finished, hand rubbed, both edges neatly bound with white celluloid, fancy colored wood inlaying around sound-hole and edges and down center of back, ebonized finger-board, pearl position dots, rosewood veneered head piece, brass patent heads, steel strings, ebonized bridge .....Each 13.75

AMERICAN MAKE GUITARS

Note these advantages in purchasing Guitars of our make. You secure for your trade:

1. The only Guitars having a mathematically correct finger-board.
2. Guitars made from thoroughly seasoned material by skilled workmen, working in daylight.
3. Guitars whose patent heads have no "lost motion"
4. Guitars that possess a clear, far-carrying musical tone.
5. Guitars of the most graceful model ever designed

STANDARD SIZE.

No. 9490 Mahogany finish back and sides, hand-polished, spruce top, fancy colored wood inlaying around sound-hole, edge inlaid and bound with celluloid, neck mahogany finish, finger-board with pearl position dots, our own make nickel-plated patent head, No. 930 metal tail piece, nickel plated, strung with steel strings.....Each $9 75
No. 9505 Dark mahogany finish back and sides, hand polished, spruce top, fancy colored wood inlaying around sound hole edge inlaid with fancy colored woods and bound with celluloid, neck mahogany finish, finger-board with pearl position dots, our own make nickel plated patent head, No. 930 metal tail piece, nickel plated, strung with steel strings..Each 10.75
No. 9615 Birch back and sides, dark mahogany finish, hand polished, spruce top, broad, fancy colored wood inlaying around sound hole and edge, top and back edges bound with celluloid, neck mahogany finish, finger-board with pearl position dots, our own make nickel-plated patent head, No. 930 metal tail piece, nickel plated, strung with steel strings.....Each 11.25

THREE-QUARTER SIZE

No. 9610 Same description as No. 9615, Three-Quarter Size, strung with steel strings on metal tail piece No. 930.....Each 11.25

STANDARD SIZE.

No 9626 Beautifully figured birch back and sides dark mahogany finish, hand polished, spruce top, fancy colored wood inlaying around sound-hole corded inlaying on edge, top and back edges bound with celluloid, fancy inlaid stripe in back neck mahogany finish, veneered head piece, rosewood finger-board, pearl position dots, our own make nickel-plated patent head, No. 936 metal tail piece, nickel plated, strung with steel strings .....Each 15.25
No. 9725 Birch back and sides, rosewood finish, spruce top, broad fancy colored corded wood inlaying around sound-hole and edge, top and back edges bound with white celluloid, fancy colored stripe in back, body grained a rich rosewood and beautifully finished, neck mahogany finish, veneered head piece, rosewood finger-board, pearl position dots, our own make nickel-plated patent head, No. 935 tail piece, nickel-plated, strung with steel strings .....Each 12.75

No 9965 Mahogany back and sides, spruce top, broad fancy colored wood inlaying around sound hole, top edge inlaid with fancy colored wood and bound with white celluloid, body finished a beautiful shade of light mahogany, hand polished neck mahogany finish, finger-board with pearl position dots, our own make nickel-plated patent head, No. 930 metal tail piece, nickel plated strung with steel strings.....Each $13 25
No. 9980 Beautiful figured dark mahogany back and sides, hand polished, broad fancy corded colored wood inlaying around sound-hole and edge, top and back edges bound with white celluloid, broad fancy corded stripe in back, mahogany neck, rosewood veneered head piece ebony finger-board bound with celluloid, and pearl position dots, our own make nicke plated patent head, ebony bridge, strung with gut strings.....Each 21.25
No 9840 Quartered oak back and sides, hand polished, spruce top, broad fancy colored wood inlaying around sound-hole, edge inlaid with broad fancy colored wood inlaying and bound with white celluloid neck mahogany finish finger-board has pearl position dots our own make nickel-plated patent head, No. 930½ metal tail piece, nickel plated, strung with steel strings... Each 11 25
No. 9846 Quartered oak back and sides, hand polished spruce top, broad fancy colored wood inlaying around sound hole, top and back edges inlaid with broad stripe of fancy colored wood and bound with white celluloid, broad stripe of fancy colored wood inlaying down center of back, neck mahogany finish, veneered head piece, rosewood finger-board, pearl position dots, our own make nickel-plated patent head and metal tail piece, strung with steel strings.....Each 15 25

CONCERT SIZE.

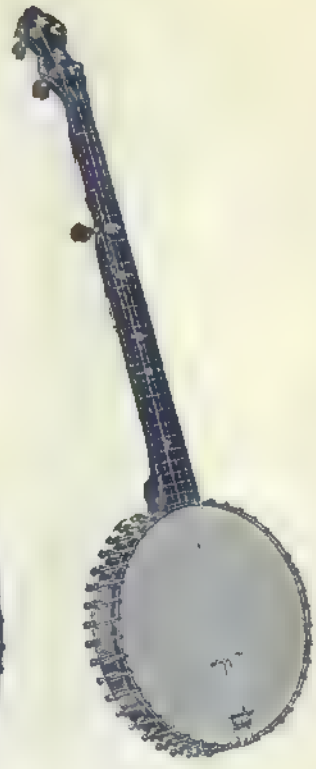
No. 9860 Concert Size—Beautiful Danish oak back and sides, spruce top, broad corded fancy colored wood and celluloid inlaying around sound hole, top and back edges bound with white celluloid, fancy colored wood stripe in back mahogany neck rosewood veneered head piece body and neck beautifully hand polished, ebony finger-board bound with celluloid, pearl position dots, our own make nickel-plated patent head, ebony bridge, strung with gut strings.....Each 18 75

BANJOS

Nos. 91109-91124.

No. 9759

No. 9831



No. 9839.

10-INCH.

No. 9607 Nickel shell, wood lined, calfskin head, 7 nickel-plated hexagon brackets, single wired edge shell, raised frets, position dots, imitation mahogany neck.....Each $ 6.75
No. 9609 Same description as No. 9607, with 9 nickel brackets .....Each 7.00

11-INCH.

Nickel Shells, Wood-Lined, Calfskin Heads.

No. 91109 13 nickel plated hexagon brackets, raised frets, birch neck.....Each $ 7.25
No. 91110 17 nickel-plated hexagon brackets, raised frets, birch neck.....Each 7.75
No. 91111 25 nickel-plated hexagon brackets, raised frets, birch neck.....Each 8.75
No. 91122 25 nickel-plated hexagon brackets, raised frets, birch neck, wired edge.....Each 9.25
No. 91124 39 nickel-plated hexagon brackets, raised frets, birch neck, wired edge.....Each 10.75

11-INCH AMERICAN MAKE BANJOS

DOUBLE WIRED EDGE.

No. 9825 Nickel-Plated, Double Wired Shell, 10½ inches in diameter, 3 octave scale, 25 hexagon brackets, rabbeted top band, calfskin head, mahogany finished neck, heavy ebony finger-board and head piece, pearl position dots, black pegs, nickel-plated tail piece.....Each $15.25
No. 9831 Same description as No. 9825, with 31 brackets .....Each 17.25

THE IMPROVED MYSTIC.

No. 9731 Wired Nickel-Plated Shell, wood-lined, 11 inches in diameter, 3 octave scale, 31 elbow brackets, calfskin head, rabbeted top band, neck mahogany finished, ebony finger-board and head piece, inlaid with large figure, white celluloid pegs, nickel-plated tail piece.....Each $17.25
No. 9739 Same description, with 39 brackets.....Each 18.25

These Banjos are made with extra care, are handsomely ornamented, carefully adjusted and are intended to supply the want of a well-made professional instrument at a medium price.

No. 9826 Nickel-Plated, Double Wired Shell, wood-lined, 11 inches in diameter, 3 octave scale, 25 elbow brackets, heavy rabbeted top band, calfskin head, imitation cherry neck, heavy ebony finger-board and head piece, inlaid with elaborate pearl figures, patent pegs, nickel-plated tail piece .....Each 25.75
No. 9839 Same description as No. 9826, with 39 brackets .....Each 29.50

No. 9826.

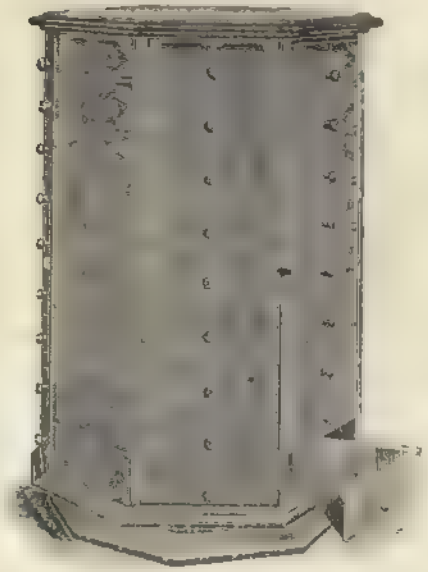
PROFESSIONAL.

No. 9832 Nickel-Plated, Double Wired Shell, wood lined, 3 octave scale, 11 inches in diameter, 31 elbow brackets, heavy rabbeted top band, extra fine calfskin head, dark mahogany finished neck, heavy ebony finger-board and heel beautifully inlaid with Japan pearl figures, fancy white pegs, best quality of strings, special bridge, nickel-plated tail piece.....Each $28.25
No. 9837 Nickel-Plated, Double Wired Shell, wood lined, 3 octave scale, 11 inches in diameter, 31 elbow brackets, Rogers calfskin head, heavy rabbeted top band, carved mahogany neck, heavy ebony finger-board, head piece and tail piece beautifully inlaid with Japan pearl engraved, patent pegs, special bridge, best quality of strings, new style nickel-plated tail piece.....Each 40.75
No. 9824 Heavy Curly Maple Shell, bottom edge rounded with bone and inlaid with fancy design. Top part has metal reinforcement on which the head rests, 24 Premier brackets, metal grooved top band, beautiful curly maple neck with heavy ebony finger-board and heel piece, back of head covered with ebony, also ebony strip down center; colored wood strips under ebony parts, giving a very decided contrast, most elaborately engraved pearl figures in the heel piece, also fancy pearl figures in finger-board, patent pegs, selected strings, special bridge, and an entirely new design tail piece.....50.75

*SCREW AND BOLT CASES

AMERICAN BOLT & SCREW CASE CO.

REVOLVING SCREW



Poplar Wood Cases, Cherry Stained

No.		Each
1.	Screw case, 72 drawers, height 33 in., width 21 in.	$33.00
2.	Screw case, 80 drawers, height 36 in., width 21 in.	37 50
3.	Screw case, 88 drawers, height 39 in., width 24 in.	42 00
4.	Screw case, 96 drawers, height 42 in., width 25 in.	46 00

Oak Cases

1.	Screw case, with knobs and label holders	$44 00
2.	Screw case, with knobs and label holders	48 00
3.	Screw case, with knobs and label holders	55.00
4.	Screw case, with knobs and label holders	71 50

No. 1. Screw Case List

½ in., Nos. 3, 4, 5, 6, 7; ⅝ in., 5, 6, 7, 8; ¾ in., 5, 6, 7, 8, 9; ⅞ in., 7, 8, 9, 10, 11 in., 6 to 14, 1 in., 7 to 15, 1¼ in., 8 to 16, 1½ in., 9 to 17; 2 in., 10 to 18; 2½ in., 12 to 16; 3 in., 16 to 22.

No. 2. Screw Case List

⅜ in., Nos. 2, 3, 4, ½ in., 3 to 7, ⅝ in., 4 to 8, ¾ in., 4 to 10; ⅞ in., 6 to 11; 1 in., 6 to 14; 1¼ in., 7 to 15; 1½ in., 8 to 15; 1½ in., 8 to 16; 1¾ in., 9 to 17; 2 in., 10 to 18, 2½ in., 12 to 16; 3 in., 16 to 22.

No. 3. Screw Case List

¼ in., Nos. 1 and 2; ⅜ in, 2 to 5; ½ in., 3 to 7; ⅝ in., 4 to 9; ¾ in., 4 to 10; ⅞ in., 6 to 12; 1 in., 6 to 15; 1¼ in., 7 to 16; 1½ in., 8 to 16; 1¾ in., 9 to 18; 2 in., 10 to 18; 2½ in., 12 to 16; 3 in., 16 to 22.

No. 4. Screw Case List

¼ in., Nos. 1 and 2; ⅜ in., 2 to 6; ½ in., 3 to 8; ⅝ in., 4 to 11; ¾ in., 4 to 12; ⅞ in., 6 to 12; 1 in., 6 to 16; 1¼ in., 7 to 15; 1½ in., 8 to 16; 1¾ in., 9 to 17; 2 in., 10 to 18; 2½ in., 12 to 16; 3 in., 16 to 22; 3½ in., 18 to 20.

REVOLVING BOLT

Poplar Wood Cases, Cherry Stained

No.		Each
No. 1.	Bolt case, 60 in. high, 30 in. wide, 98 drawers each	$65.30
No. 2.	Bolt case, 65 in. high, 30 in. wide, 104 drawers, each	71.30

Oak Cases

No. 1.	With label holders	$82.75
No. 2.	With label holders	91.50

No. 1. Bolt Case List

Tire Bolts, ⅞x1¼, 1½, 1¾, 2, 2¼, 2½, 2¾, 3 in.
¼x1¼, 1½, 1¾, 2, 2¼, 2½, 2¾, 3 in.
⅞x2½, 2¾, 3 in.

Carriage Bolts, ¼x1½ to 5 in. by ¼ inches.
⅜x1½ to 6 in. by ¼ inches.
½x2 to 5 in. by ¼ inches and 6 in.
⅝x2 to 7 in. by ¼ in. and 8, 9, 10 in.
¾x2 to 7 in. by ¼ in. and 8, 9, 10, 11, 12 inches.

No. 2 Bolt Case contains the following sizes in addition to No. 1 list:

⅞x7½, 8½, 9½ in.
½x7½, 8½, 9½ in.

Both screw and bolt cases may be supplied with locking device, with or without key.

Price on application.

*Above cases are not carried in stock, but will be furnished direct from Ohio factory.

PADLOCKS

Illustrations Actual Size

No. 453J

No. 674N

No. 671V

No. 453J. 1½ inch size; case, wrought steel; ivory black finish; shackle, malleable iron, brass plated. Two flat steel nickel plated keys warded, 6 changes.....per dozen, $2.60

No. 674N. 1¾ inch size; case, wrought steel, nickel plated; shackle, steel, nickel plated. Two flat steel nickel plated keys, two lever tumblers, 6 changes.....per dozen, $3.00

No. 671V. 1 inch size; case, steel, ivory black finish; shackle, steel, nickel plated. Two flat steel nickel plated keys, two lever tumblers, 12 changes.....per dozen, $4.40

One half dozen in a box

No. 645C. 2 inch size, case and shackle steel, old coppered. Two flat steel nickel plated keys, three lever tumblers, 12 changes, per dozen.....$5.20

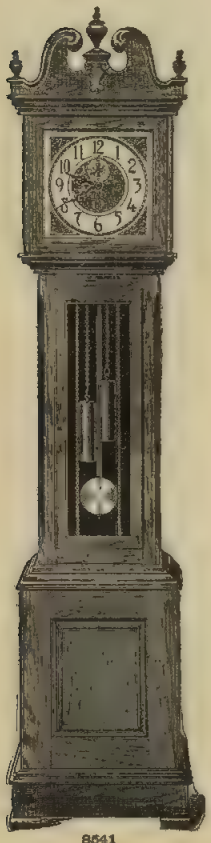
No. 9645J. 2 inch size, steel case, ivory black finish, steel shackle, brass plated. Three lever tumblers, two malleable iron barrel keys, rolled bright and nickel plated, 12 changes, per dozen.....$5.20

One-half dozen in a box

Grandfather or Hall Clocks

The Most Perfect Timekeepers. Absolutely Guaranteed. Please State Whether Oak or Mahogany Is Desired.

The weight principle used in the building of these clocks is recognized as the most perfect principle for accurate timekeeping. If you wish to own a timepiece by which watches can be regulated, this is the type to own. Clocks of this kind can be handed down from generation to generation and always keep perfect time.



8541

Made by the Ansonia Clock Co. Oak or Mahogany. 12 inch Gilt and Silvered Dial, Brass Ornaments, 8 Day, Chain Weight, Half-Hour Strike, Gong, Height 93 inches. Price, each Oak..... **$105 00**
Price, each, Mahogany..... **110 00**
Shipping Weight about 175 lbs.

8542

Made by the New Haven Clock Co. Antique Oak or Mahogany, 12-inch Etched Silver Dial, Height 72½ inches, Width 20½ inches, 8 Day Half-Hour, Strike Cathedral Gong. Price, each **$92 75**
Shipping Weight, about 183 lbs.

8543

Made by the Waterbury Clock Co. Oak or Mahogany Finish, 12 inch Gilt and Silver Dial, 8-Day, Chain Weight, Half Hour Strike, Gong, Moon's Phases, Beats Seconds, Height 91½ inches, Width, 23½ inches. Price each..... **$110 65**
Shipping Weight about 220 lbs.

Don't Hesitate to Write and Ask Questions, We Want You to Know All About Our Goods.

Quail and Cuckoo Clocks and Cuckoo Clocks with Music

These Clocks are all imported direct from the famous Black Forest in Europe. They are all hand carved and represent a wonderful amount of labor.

8536
Quail and Cuckoo Clock, Walnut Only, with Inlaid Ash, Ebony and Mahogany Ornaments, Quarter Hour Strike and Call, Height 25 inches, Width 17 inches.
$23.85 each. Shipping Wt., about 35 lbs.

8537
Quail and Cuckoo Clock, Walnut or Oak, Quarter-hour Strike and Call, Height 21½ inches, Width 16½ inches.
$18.35 each.
Shipping Weight about 35 lbs.

8538
Quail and Cuckoo Clock, Walnut or Oak, Quarter-hour Strike and Call, Height 26 inches, Width 18 inches Shipping Weight about 40 lbs.
$36.70 each.

8539 Clock with Music, Walnut Only Plays a Tune Every Half-Hour, Height, 25 inches, Width 17 inches, Shipping Weight about 30 lbs
$39.40 each.

Be Sure and State Whether Walnut or Oak Is Desired.

8540 Cuckoo Clock with Music, Walnut only, Half Hour Strike and Call with Music Attachment Playing a Tune at the same time, Height 22 inches, Width 16 inches, Shipping weight about 30 lbs ..... **$35.15** each.

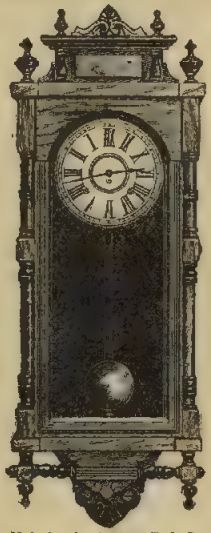
Our Strong Points Are Highest Quality, Lowest Prices and Satisfactory Service.

High Grade Wall Clocks

Guaranteed Perfect in Construction

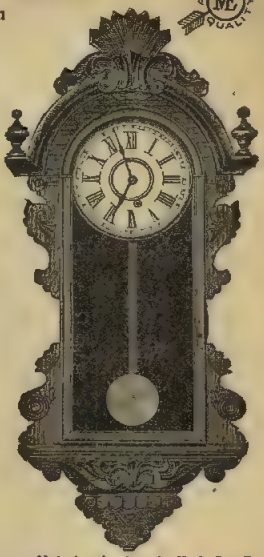
Made by the Ansonia Clock Co., Dark Wood or Oak. Dial, 8 inches. Height 38½ inches.

8429 8-Day, Time. Price, each **$15 00**
8429 8-Day, Half-Hour Gong Strike Price, each **$16 50**



Made by the Ansonia Clock Co., Dark Wood or Oak, Dial 8 inches. Height 37 inches.

8430 8-Day, Time. Price, each **$15 00**
8431 8-Day, Half-Hour, Gong Strike. Price, each **$16 50**



Made by the Ansonia Clock Co., Dark Wood or Oak. Dial 8 inches. Height 36½ inches.

8432 8-Day, Time. Price, each. **$15 00**
8433 8-Day, Half-Hour, Gong Strike. Price, each..... **$16 50**

Made by the Waterbury Clock Co., Rosewood Veneered, Brass Trimmings, Dial 8 inches, Height 19 inches. Price, each.

8434 8-Day, Time. **$7 50**
8435 8-Day, Half-Hour Strike.. **9 00**
8436 Alarm Additional **1 00**

Made by the New Haven Clock Co., 8-inch Drop Octagon, solid Oak Dial, 8 inches. Height 18¼ inches.

8437 8-Day, Time. Price, each .. **$7 00**
8438 8-Day, Strike Price, each.. **8 50**
8439 Calendar Additional **0 75**

Made by the New Haven Clock Co., 10-inch Drop Octagon, Solid Oak. Dial 10 inches. Height 21½ inches.

8440 8-Day, Time. Price, each.. **$7 50**
8441 8-Day, Strike. Price, each.. **9 00**
8442 Calendar Additional **0 75**

There is Satisfaction in Knowing Where to Get What You Want, When You Want it, and Always at the Right Price.

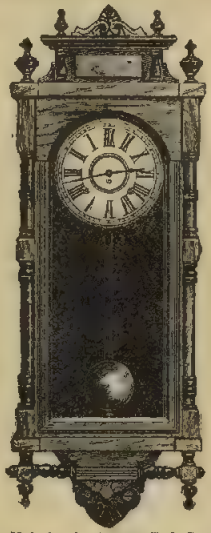
"THE HOUSE OF QUALITY"

High Grade Wall Clocks

Guaranteed Perfect in Construction

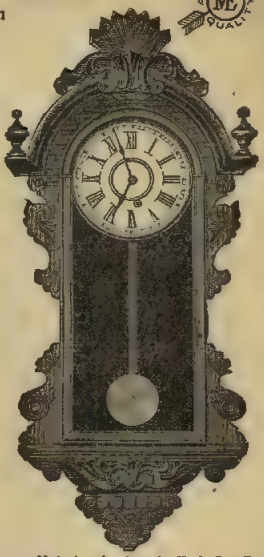
Made by the Ansonia Clock Co., Dark Wood or Oak. Dial, 8 inches. Height 38½ inches.

8429 8-Day, Time. Price, each **$15 00**
8429 8-Day, Half-Hour Gong Strike Price, each **$16 50**



Made by the Ansonia Clock Co., Dark Wood or Oak, Dial 8 inches. Height 37 inches.

8430 8-Day, Time. Price, each **$15 00**
8431 8-Day, Half-Hour, Gong Strike. Price, each **$16 50**



Made by the Ansonia Clock Co., Dark Wood or Oak. Dial 8 inches. Height 36½ inches.

8432 8-Day, Time. Price, each. **$15 00**
8433 8-Day, Half-Hour, Gong Strike. Price, each..... **$16 50**

Made by the Waterbury Clock Co., Rosewood Veneered, Brass Trimmings, Dial 8 inches, Height 19 inches. Price, each.

8434 8-Day, Time. **$7 50**
8435 8-Day, Half-Hour Strike.. **9 00**
8436 Alarm Additional **1 00**

Made by the New Haven Clock Co., 8-inch Drop Octagon, solid Oak Dial, 8 inches. Height 18¼ inches.

8437 8-Day, Time. Price, each .. **$7 00**
8438 8-Day, Strike Price, each.. **8 50**
8439 Calendar Additional **0 75**

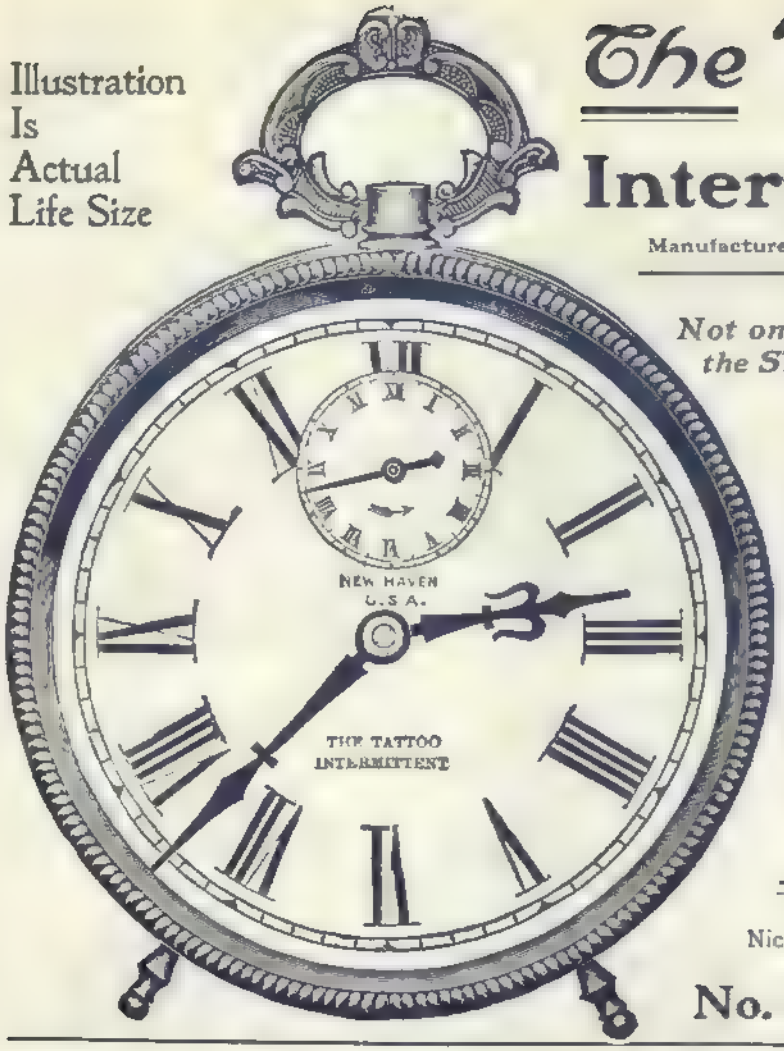
Made by the New Haven Clock Co., 10-inch Drop Octagon, Solid Oak. Dial 10 inches. Height 21½ inches.

8440 8-Day, Time. Price, each.. **$7 50**
8441 8-Day, Strike. Price, each.. **9 00**
8442 Calendar Additional **0 75**

There is Satisfaction in Knowing Where to Get What You Want, When You Want it, and Always at the Right Price.

"THE HOUSE OF QUALITY"

Illustration Is Actual Life Size



The Tattoo Intermittent Alarm

Manufactured by the NEW HAVEN CLOCK COMPANY

Not only the best American Alarm Clock, but the STANDARD Alarm Clock of the World

This clock has a 4½-inch case and is fitted with a 4-inch bell-metal gong on the back.

No one can over-sleep with a 4-inch gong sounding intermittently for a quarter of an hour. It rings like a fire alarm every few seconds for fifteen minutes.

The alarm can be stopped at will by means of our patent switch.

The Original Intermittent Alarm Clock

Nickel finish case. One-day time alarm.

No. 6158 Each - - $2.98

The Globe Eight-Day Victory

When you arise you stop the alarm ringing by pushing in on button marked "Stop Alarm." The "Globe Eight-Day Victory" Alarm automatically operates the push-button switch so that you do not need to touch your clock but once a week to wind the time and alarm springs. This clock is also fitted with an "Alarm" and "Silent" switch for use when time only is wanted.

All You Do Is To Wind It Once A Week. It Calls You Every Morning.

With the ordinary alarm clock you stop the alarm from ringing by moving the switch to "Silent;" but if you neglect to push the switch back to "Alarm" on retiring the clock will not alarm the next morning.

A special feature of this clock is that it has an Almost Noiseless Beat.

6-inch seamless nickel plated brass case with 4-inch bell-metal gong on back. Height, 7¼ inches; width, 6 inches. 4¼-inch dial.

Eight-Day Time Alarm

Illustration Is Reduced Size

Nickel Finish Case. Eight-Day Time Alarm.

No. 6159 Each, - - $5.40

WATERBURY CLOCK CO.'S FINE NICKEL ALARM CLOCKS

GUARANTEED ACCURATE TIMEKEEPERS. PRICES EACH.

WASP LONG ALARM—Nickel
One-day time, alarm. 2-inch dial, beveled glass. Alarm runs 1½ minutes, can be stopped at pleasure. Height, 3¾ inches.
No. 6160 Each.....$2.90

WASP TIME—Nickel
One-day time. 2-inch dial, beveled glass. Height, 3 inches.
No. 6161 Each.....$1.90

SUNRISE—Nickel
One-day time, alarm. 4-inch dial. Height, 6¼ inches.
No. 6162 Each.....$1.90

LUMINOUS-SUNRISE—Nickel
One-day time, alarm. 4-inch dial. Height, 6⅛ inches.
No. 6163 Each.....$2.20

To obtain the best results, the dial should be exposed during the day time to a bright light and it will be plainly visible in the dark. At night use at a distance suitable to the eyesight.

CYCLONE

Illustration actual size of clock

Nickel or Brass

Long Alarm or Long Alarm with Intermissions

One-day time, alarm. 4¾-inch dial. Height, 7 inches.

The long alarm runs 5 minutes continuously.

The long alarm with intermissions will ring half a minute and be silent half a minute alternately for 15 minutes.

Can be set for either by a switch at the top.

Attached keys and hand set.

5-inch bell at back.

No. 6164

Price Each - $4.10

"EVER READY" PORTABLE ELECTRIC LIGHT.

PRICES EACH

STYLE A
Metal case, . igator covered
Each $1 80
Extra with Osram . . b 55

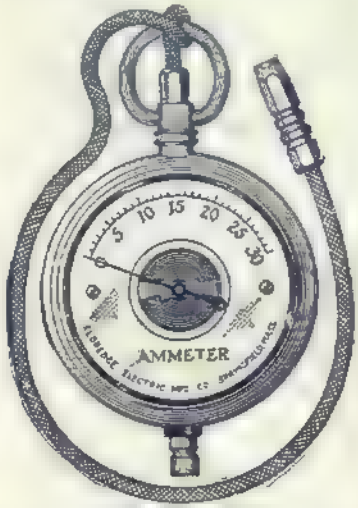
STYLE A—SPECIAL
Fibre Case.
Each..... $1 80
Extra with Osram bulb . 55

STYLE B
Metal, cloth covered.
Each $2.50
Extra with Osram bulb . .55

BLACK METAL B
Black metal.
Each..... $1 80
Extra with Osram bulb..... 55

Extra Batteries for above, each 50 cents.
Osram Bulbs when purchased separately list $1 10

JUMBO COAT POCKET LIGHTS
Has snap switch, gives permanent light when desired.
No. 20 Size 1¼x2¾x5 inches. Weight, 20 ounces. Each $2 20
Extra, with Osram bulb . . .55
Extra Batteries, 80 cents.



POCKET AMMETER
No. 25 Pocket Ammeter. Very convenient for automobile, motor cycle and launch. Used for testing dry cells. Assures you of the strength of your battery.....Each, $4.00

"EVER READY" FLASH LIGHT
No. 1 Pocket, 1½x8¼ inches ..... $2 1?

IMPROVED "EVER READY" FLASH LIGHT
Made of material impervious to water.
No. 4 Fibre finish, 1,½x8½ inches, each..... $2.80

"EVER READY" MINER'S FLASH LIGHT
Large lens, bell reflector.
No. 14 1¼x8½ inches, each..... $4 40
N B.—Can be furnished with glove button fastener, giving permanent light, when desired, for continuous burning

OUR SPECIAL LEADER
Metal case, cloth covered, 1¼x8½ inches.
Comet No. 5 Best value ever offered in flash lights. Has same battery and bulb, and is same size as No. 1 "Ever Ready." Has arrangement for steady light when desired.
Price, complete..... $1 80
The above can be fitted with Osram bulb. Extra..55c

Batteries for above lights, each 65c.

MINIATURE OSRAM VEST POCKET LIGHT.

Batteries.—The most important part of a flashlight is naturally the Battery, as upon the service given and its length of life when not in use depends the efficiency of the article. The batteries furnished with the "Eveready" Miniature Osram Vest Pocket Lights are manufactured by an entirely new principle in dry cells. We are now able to produce a tiny Battery which, in combination with the Osram Bulb, will give greater light, longer service, and will stand longer on the shelf without losing strength than old style batteries sometimes larger.

	Each
No. 2661 2-cell, all Nickel, complete.....	$2 25
Extra Battery, No. 650.....	50
Extra Bulb, No. 1480, 2½ V	1 10

OSRAM LIGHT
No. 2704.
Fibre Case, Nickel Trimming, Size 1¼x6¼ inches. Fitted with Osram Bulb, 2½ Volt.
Price..... $3 00
No. 500. Extra Battery . . 50

No. 6602.
Small Vest Pocket Size, Cloth Covered, Fitted with Osram Bulb, 2½ Volt.
Price . $2 35
No. 502. Extra Battery.. . .40

"EVER READY" ELECTRIC FLASH LIGHTS
The most practical portable lights ever invented. They give from 6,000 to 8,000 brief flashes of a few moments' duration and can be used for continuous light if desired. Useful wherever and whenever you would use any other light and absolutely safe. Cheaper than matches and candles. Batteries are easily renewed. No wires to connect or chemicals to spill. Extra batteries can be obtained in any part of the world.
No. 1951 "Ever Ready" Osram Coat Pocket Light. Size 1¼x3¼x5 inches. Cloth covered, nickel trimmings..... $2.70
Extra batteries. . . 65c
Extra bulbs..... . . $1 10

BAROMETERS

PRICES EACH

Illustrations are Reduced Size

No. 1364

No. 1367

No. 1645

ANEROID

For Wall Use

No. 1364 Brass lacquered case. Diameter 5-inch. Closed porcelain dial. Good quality. Style cut No. 1364 ..... each, $14 85

No. 1365 Brass lacquered case. Diameter 5-inch. Closed porcelain with curved thermometer at base dial. Good quality. Style cut No. 1364 ..... each, 17.00

No. 1366 Brass lacquered case. Diameter 5-inch. Open porcelain, visible works dial. Good quality. Style cut No. 1367 ..... each, 17.00

No. 1367 Brass lacquered case. Diameter 5-inch. Dial, open porcelain, visible works and with curved thermometer at base. Good quality. Style cut No. 1367 ..... each, 19 10

No. 1600 Brass lacquered case. Diameter 3⅝-inch. Dial, open card, visible works. Fair quality. Style cut No. 1600 ..... each, 3.70

No. 1601 Brass nickeled case. Diameter 3⅝-inch. Dial, open card, visible works. Fair quality. Style cut No. 1600 ..... each, 5.70

No. 1603 Brass nickeled case. Diameter 4¼-inch. Dial, open card, visible works. Fair quality Style cut No. 1600 ..... each, 4.25

No. 1604 Brass lacquered case. Diameter 4¼-inch. Dial, open card, visible works. Fair quality. Style cut No. 1600 ..... each, 7 95

No. 1600

No. 1605 Brass nickeled case. Diameter 4⅜-inch. Dial, open card, visible works. Fair quality. Style cut No. 1600 ..... each, $ 7.10

No. 1606 Brass lacquered case. Diameter 5½-inch. Dial, open card, visible works. Fair quality. Style cut No. 1600 ..... each, 6.10

No. 1607 Brass lacquered case. Diameter 3-inch. Dial, open card, visible works. Good quality. Style cut No. 1600 ..... each, 5.70

No. 1615 Brass lacquered case. Diameter 4¼-inch. Dial, open card, visible works. Good quality. Style cut No. 1600 ..... each, 7.65

No. 1616 Brass nickeled case. Dial, open card, visible works. Good quality. Style cut No. 1600 ..... each, 7 65

No. 1645 Golden oak, green oak or mahogany case. Diameter 4-inch. Dial, open enameled. Fair quality Style cut No. 1645 ..... each, 12.75

HOLOSTERIC

For Wall Use

No. 1626

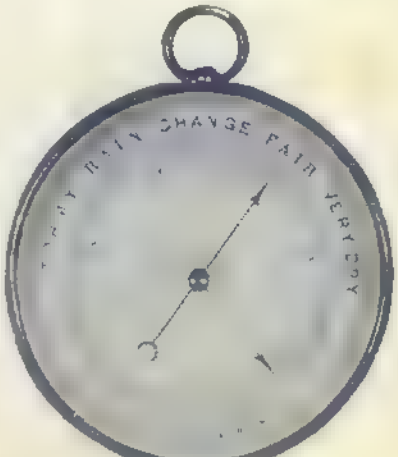
No. 1626 Brass lacquered case. Diameter 5½-inch open metal silvered dial. First quality. Style cut No. 1626. ..... each, $32 50

No. 1629 Brass lacquered case. Diameter 5½-inch Dial, open metal silver, for use in high altitudes, reading from 22 to 31. First quality. Style cut No. 1626 ..... each, 35 35

No. 1630 Brass lacquered case. Diameter 5½-inch Dial open metal silvered, with curved thermometer at base. First quality. Style cut No. 1626. ..... each, 37 4

No. 1633 Brass lacquered case. Diameter 5-inch Closed metal silvered dial. First quality Style cut No. 1633 ..... each, 23 35

No. 1634 Brass lacquered case. Diameter 5-inch Closed card dial. First quality Style cut No. 1633 ..... each, 20



No. 1633

The Ewbank "Portable Power Plant" Truck

The Ewbank Power-Transmission and Motor Company, Portland, Ore., has in process of construction a truck, to be used as a railroad power unit. The power plant is the invention of H. B. Ewbank, Jr., and is nothing more than an electric generating plant. This portable power plant has a gasoline engine generating electricity through its generator, transmitting the current to its motor and hence to the wheels.

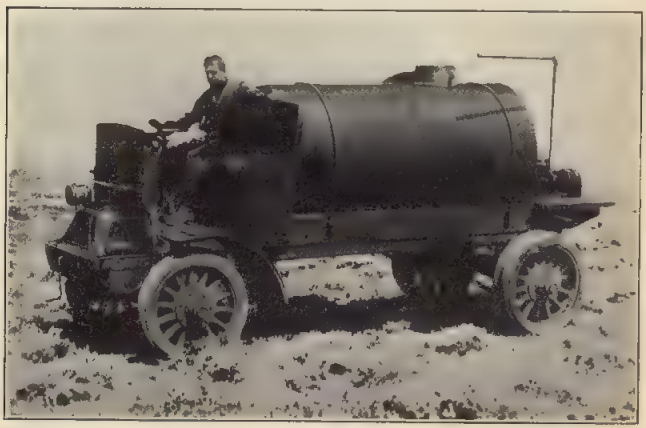
An automobile 'bus to replace a trolley line in New Hampshire and Maine was sent to Fife Bros., Portsmouth, N. H. It is said to be the first of its kind built. The machine is a Morgan truck of five tons capacity, fitted with a special body built by the Jewett-Gamage Company. The automobile can accommodate about thirty passengers. The owners of the new auto 'bus have conducted a trolley line of the dummy variety for many years between Portsmouth, Kittery and nearby points. They have decided to replace their cars with automobiles if this machine works out well.

Gemco Emergency Tire Grips

The Garage Equipment Manufacturing Company, of 742 S. Pierce Street, Milwaukee, Wis., has placed on the market an emergency grip for motor trucks, the same being illustrated herewith. These grips can be placed anywhere between the spokes. It

The Gemco Tire Grip.

will be noted that the chain portion does not extend beyond the tread of the tire, thus preventing the chain from being sheared off by coming in contact with curbstones, car tracks, etc. This grip is made in ten different sizes to fit tires from 2 in. single up to 10 in. single or 5 in. twin. The prices are from 45 cents to $1 each, according to size.



Unique Truck Service.

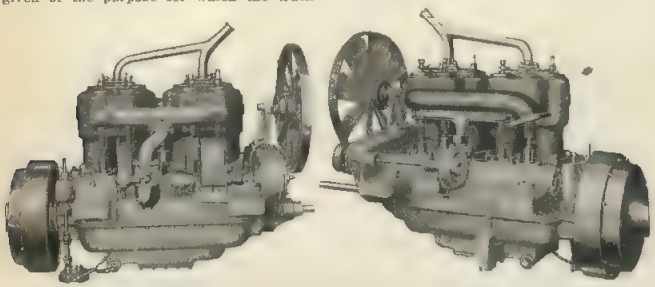
Among the many utilitarian uses to which the motor truck has been placed and found not wanting—one just learned of in connection with the Rock Creek Conservation Company, Wyoming, is decidedly novel and interesting. The truck is a Grabowsky, used for the purpose of supplying water to traction engines over an area of 12 x 8 miles. Mounted on the rear end of the machine is a 2 h. p. engine and rotary pump, for the dual purpose of filling the tank from ponds and irrigation ditches, as well as discharging into the water tanks on tractors while same are in motion, the idea being to prevent the loss of time by stopping the tractors. The truck is operated continuously—pulling loads over bad roads and unbroken prairie, thickly studded with sage, and the fact that it is giving excellent service, speaks volumes for the commercial car.

The Victor Motor Truck

The truck bearing the name "Victor," is the product of the Victor Motor Truck Company, and is manufactured at their factory, Buffalo, N. Y.

The Chassis.

The frames of Victor motor trucks are channel steel, of a size and weight sufficient to give the strength necessary for carrying the load the truck is designed to carry, plus the natural strain put upon it. The wheels are of the artillery type and built of second growth hickory with oak felloes, and are larger than ordinarily used In the smaller trucks these wheels are equipped with solid tires, but pneumatic tires can be had at the option of the customer. Where complete information is given of the purpose for which the truck is to be employed, the body itself is adapted to this work instead of mounting on the regular chassis a body designed for those particular requirements.



One of the motors used in the Victor trucks showing the intake and the exhaust side force feed and splash and the ignition has Bosch magneto and batteries Lubrication is

The Engine.

In the 1500 lb. and one ton truck the unit power plant with three point suspension is employed. The motor is four-cycle, four-cylinder, with cylinders cast in pairs, possessing the same substantial quality that characterize the motors used in larger trucks.

In the larger trucks motors of the four-cycle, four-cylinder type, of sufficient capacity to develop power required by the particular truck in which it is used, are employed. The cylinders are cast of close grained gray iron, a material that possesses high tenacity and a smooth surface

Each cylinder is accurately machined and the bores are ground to a mirror-like smoothness. The piston and piston rods are ground to perfect size and fit closely, yet with every allowance for expansion, each piston being accurately balanced. The connecting rods and shaft bearings are extra long and accurately fitted to give perfect contact, insuring a long life without replacement or adjustment. Perfect lubrication is maintained at all times by the centrifugal pump combined with the splash system which feeds the oil to all the bearings and moving parts.

Cooling.

The motors used are water cooled, the circulation of the water being obtained by means of a powerful centrifugal pump, which forces the water through the radiator, which is of the latest improved honeycomb type, where it is rapidly cooled by a force draft created by a powerful belt-driven fan.

Power Transmission.

The transmission used in the Victor trucks consists of a properly aligned shaft operating in friction reducing bearings with accurately cut and meshed gears. This transmission is carefully assembled and fitted, and operates with no greater loss than that bound to be met in the best mechanical design. All the gears used in this transmission are of special heat treated steel, which secures hardness without sacrificing toughness and tenacity. The gears are of much larger size than are ordinarily used in trucks of the same rated capacity. These gears operate in a bath of oil so that good lubrication at all times is assured.

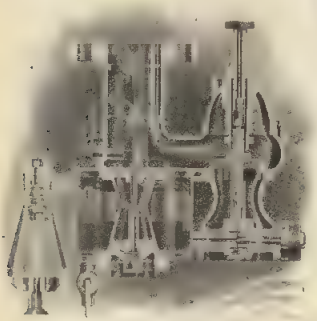
The transmission used in all Victor trucks is of the selective type, three speeds forward and one reverse.

Steering Gear and Control.

The steering gear consists of a wheel mounted upon a hollow column operating a worm gear and segment.

The Feps Carburetor

This carburetor, which is one of the latest to make its debut to the trade, is constructed in such a manner that it will give maximum power on hills or for speed, absolutely smooth action or flexibility, sensitiveness in responding to sudden load and, without sacrificing any of these features, producing extremely high mileage. This carburetor is the invention of J. L. Fritz, and is being built by the Schoen-Jackson Company, of Media, Penna., well-known manufacturers of flexible metallic tubing. The carburetor is being built in a complete plant apart from the tubing works.



Feps Carburetor.

In its construction, no springs, balls, cams or reeds are employed, but instead for low speed, the familiar venturi tube and a jet, adjustable for the correct amount of gasoline is used. For intermediate speed there is only a flat leather faced disc and a perpendicular shaft which controls the additional supply of gasoline and air for high speed and hill work. For positive and easy starting the carburetor contains a device whereby the motor is supplied with an extra heavy mixture, automatically controlled by the vacuum. The makers claim that this device will positively start the motor with no more cranking than is necessary in warm weather. In reality, the carburetor embodies three distinct carburetors controlled by the amount of vacuum created by the position of the throttle irrespective of the motor speed or load. Weather conditions or climatic changes are said to have no effect on this carburetor and that there are no wearing parts or adjustments to be made.

Clarke-Carter Automobile Company, Jackson, Mich., manufacturers of the Cutting motor cars, has built an extensive four story addition to the present plant.

The Allen Friction Socket Wrench

The Allen Wrench & Tool Company, 4 Meadow Street, Providence, R. I., is placing on the market a fricton socket wrench which it claims takes instantaneous grip. It has no teeth, no springs, and said to

Allen Socket Wrench Set

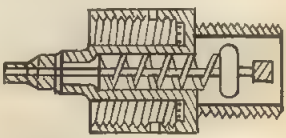
have no lost motion. This device is made from the best drop forge high carbon steel, carefully machined, pack hardened and finished. The sockets are of pressed steel, heat treated and case hardened. The wrench sets are composed of pressed steel sockets, spark plug socket, short and long extension, screw driver, and universal joint

Allen Friction Socket Wrench.

packed in a specially designed box. These sets come in three sizes, designated as size No. 31, No. 24 and No. 21, selling at $10, $8 and $8, respectively, these governed according to make-up of outfit.

De Luxe Tire Valves

The F. M. Neal Valve Company, 1048 East Main Street, Bridgeport, Conn., makes the De Luxe tire valve, shown herewith. This device can be fitted to the valve al-



De Luxe Tire Valve.

ready in the tire and is especially designed so that not much pressure from the outside is required to raise the valve from the seat. The valve mechanism is in a separate chamber, which prevents it from being clogged by dirt inside the tire.

Knox Pleasure Vehicle Line For 1913

The body designs which have been characteristic of Knox cars during the past season have been continued with important detail improvements, tending toward greater harmony in the arrangement of accessory equipment. Several important additions in the equipment have been made and their standard maintained throughout, tending toward the comfort and utility for the motorist under all conditions of touring service.

The Knox models for 1913 are practically no different from the 1912 models, yet they have slight improvements and have added to their number a new model designated as the Knox Little Six Model "46."

Knox Power Plant.

The details of Model "46" are as follows: The motor, which is of the six-cylinder type, with cylinders cast in pairs, has standard Knox detachable cylinder heads and valves in the head without cages. The motor dimensions are 4⅜-in. bore by 5½-in. stroke, developing 46 h. p. The symmetrical combustion chambers have been designed to secure the highest power, efficiency and quality of running. The clutch and transmission are assembled in one integral unit. The flexible mounting of the power unit on the three-point support is said to insure alignment, regardless of road conditions. A double ignition system with dual set of spark plugs is located directly in the combustion chambers with an automatic carburetor regulation.

The DeDion circulating system of lubrication with direct pressure on all bearings is used.

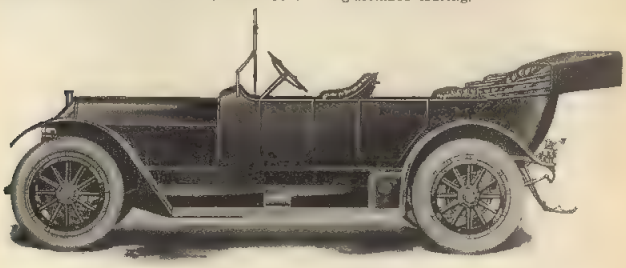
Transmission.

The Knox three-speed transmission is still retained without modification. The only changes of moment are the employment of spiral gears in the main driving set in place of the spur gear type.

Also a modification has been made in the control arrangements; thereby either a right or center position of the gear lever may be secured as desired. Important annular ball bearings are used throughout with double set of races on the main shaft. The complete transmission can be easily and quickly detached from the motor base by disconnecting the universal front joint, removing four bolts from the motor supports and detaching the brake connection.

Axles.

The front axle is of the standard Timken Roller Bearing type, I-beam section made in one integral forging. The wheel and upper pivot bearings are of Timken type designed to withstand the severe strain of long distance touring.



Knox "Little Six," Torpedo Body.

This cut shows the Knox Model 46 with its V shaped radiator, a suggestion of which can be had from the slant seen below the filler cap. The straight line effect with rounded edges is here plainly brought out.

The rear axle is of the Knox full-floating type as used heretofore. The main differential housing is of pressed steel, strong and ridged, to which the axle tubes are strongly anchored, with a thrust rod underneath, increasing the stability. The differential and bevel drive are mounted on a steel casting in one unit, thus greatly facilitating inspection and removal. The wheel bearings are imported annular ball type and driving shafts are of highest grade alloy steel. The emergency brake drums have been increased in diameter to make these brakes more efficient.

Springs and Wheels.

The springs are of alloy steel, semi-elliptic front and three-quarter elliptic rear. The front is 42 in. long and the rear 54 in. A novel method of spring lubrication has been introduced on Model "46." The spring bolts are drilled out to about two-thirds their length with ⅛-in. hole, smaller holes being drilled at right angles through the sides of the bolts at several points. Small felt plugs

Knox Model "46," 8-Cylinder Motor.

Intake side of the Knox motor, showing location of spark plugs and method of running wires. The aluminum covers fitting tightly on top of cylinder heads, are here shown to good advantage, completely enclosing rocker arm mechanism and pet cocks

are inserted in the small hole and a large front roller, thoroughly soaked in oil, inserted in the large central hole and compressed by screwing a plug in the end. The oil slowly oozes through the small plugs into the bushing, affording lubrication for a long period of time without attention.

The wheels are of the wood artillery type with tires 37 x 5 in., on Fisk demountable rims. This model has a wheel base of 130 in.

Model "46" Distinctions.

On this model a chain drive in place of the front engine gears is used which is not only quiet but greatly simplifies the assembly and timing. The sprocket on the cam shaft bolts to a carrier secured to the shaft, the carrier having two rows of nine holes and the sprocket two rows of ten holes, forming a venier adjustment, by which the valve timing can be set very accurately without disturbing the chains. Wide course pitch chains are used, stretched before assembly, so that they are found in practice to run for a long period without serious back lash

A novel feature is found in the use of aluminum covers fitting tightly on top of cylinder heads and completely enclosing rocker arm mechanism. The magneto and dynamo for lighting are located in line with each other and are driven through silent couplings made of a thick leather disc.

Bodies and Equipment.

The bodies are made with large seamless aluminum panels on strong wood frames. The equipment consists of the best quality top complete with side curtains and side slip, metal bound automatic glass front, dash shield with clock and speedometer, motor-driven tire pump, gasoline tank gage, shock absorbers, extra Fisk demountable rim, tire carrier and baggage rack, jack, tire repair kit and complete set of lamps and head lights.

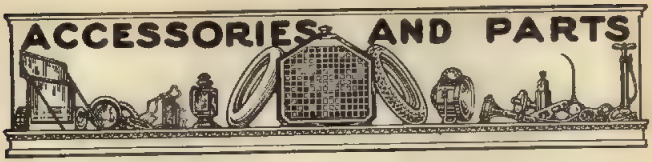
1913 Stoddard-Daytons

The line of Stoddard-Dayton cars for 1913 has been announced to the trade. The line is fraught with interest to dealers who are seeking cars of high grade at moderate prices.

With minor mechanical refinements that have been dictated by service, the 1913 line will continue the four models of the past season, with the six-cylinder Stoddard-Dayton Silent Knight as the leader, offered with an option of wire wheels.

The line consists of the Stoddard-Dayton Knight Six, built as a touring car, limousine and compartment roadster; the Stoddard-Dayton "48," with valve-in-head motor, built as touring car, limousine and compartment roadster; the Stoddard-Dayton "38," with block motor, built as a touring car, compartment roadster, coupe, limousine and landaulet, and the Stoddard-Dayton "30," with block motor, built as a touring car and compartment roadster.

Such improvements as have been made for 1913 are solely in the nature of refinements. No radical change has been made, although there are numerous details which have been modified to simplify driving and promote comfort.



The New-Miller Carburetor

This carburetor with its glass float chamber, hot air connection and high, intermediate and low speed adjustments, is manufactured by the New-Miller Carburetor Manufacturing Company, Indianapolis, Ind. The gas and air are mechanically controlled, having concentric gas inlets and annular auxiliary air inlet. It takes in hot air from the bottom in just enough quantity, it is said, to vaporize the gas, and catch it with the annular air, just above the nozzle, and this takes it and distributes the mixture evenly to all the cylinders, obviating a side inlet for auxiliary air.

Sectional View of the New-Miller Carburetor.

For low speed it has a section cut out of the butterfly, with a quarter-inch round piece of steel running across this section and having a radius the same as the butterfly that can be turned down to whatever opening is required, allowing it to close the butterfly tight, raise the needle valve from the steering-post and take pure gas into the engine with hot air only taken through the bottom. A vacuum nozzle and a needle with four wings is used to split the gasoline up as it comes out of the nozzle and act practically the same as four sprays. There is used a copper metal float and double-jointed float valve, so that the seating of the float is near positive. The sleeve on the outside of the auxiliary air is so arranged that it can be adjusted for any size engine that you care to use it on.

There are low speed, intermediate and high adjustments, and all carburetors are equipped and recommended to be used with steering-post control, as the intermediate and high adjustments are never changed after once set. The float chamber and the hot air connection can be turned in any direction desired as to the top.

This carburetor comes in sizes from 1 in. to 2 in. and in prices from $14 to $50, respectively.

Gasoline Improver

The Improved Gasoline and Oil Manufacturing Company, 35 N. Dearborn Street, Chicago, Ill., has brought out a gasoline improver which is called Herroline and which is claimed to double mileage and increase the power of all gasoline engines. Herroline is said to refine gasoline and increase the energy of engines so that when carburetor or mixer is properly adjusted, it causes the gasoline to go nearly twice as far in automobiles, motorcycles, motorboats, and other gasoline engines. It is also said to clean and keep sparking points, cylinders and valves free of carbon and increase the power and speed of the engine.

When Herroline is used about half as much gasoline is required to run your engine, it is claimed, and carburetor and mixer must be adjusted to reduce the flow of gasoline. This liquid sells for $5 per gallon and $1.25 per quart.

Cox Acetylene Starter Improved

The Cox Brass Manufacturing Company, of Pearl and Van Woert streets, Albany, N. Y., has been manufacturing an acetylene starter which is connected at the manifold. This device has been improved by the addition of an air pump and connection to each cylinder, at an extra cost of $10. Ordinarily the starter works through the manifold, but if it fails to start, the acetylene is pumped in.

The Vanguard Manufacturing Company, of Joliet, Ill., will continue its line of windshields for 1913 the same as 1912, except that there will be many refinements in detail and in appearance.

Compound Double Acting Pump

The advantage of a compound pump is that the work or effort is divided between the up and down stroke, one forcing the from the low pressure into the high pressure cylinder, and the next stroke from the high pressure cylinder into the tire. It is plain that the Compound Pump will put air from the low pressure into the high pressure pump of a given displacement, its only advantage over the single acting being that the work is divided between the up and down strokes.

The Carver Compound Double-Acting Pump.

The Carver Compound Double - Acting Pump is double acting as well as compound, the high and low pressure cylinders claimed to be effective on both up and down strokes. This result is obtained by means of transfer tubes connecting either end of the low pressure and the opposite end of high pressure cylinders, the pistons being double and acting in either direction. This construction results in the air being forced from the low pressure into the high pressure cylinder, and from same into tire at each stroke, giving, it is claimed, an almost continuous flow of air into the tire.

The Carver Pump is high grade. The cylinders are heavy, seamless brass tubing, each tube being tested to 1000 lbs. hydrostatic pressure; other parts are solid brass excepting the piston rods, which are steel Cup leathers are of finest tanned calf skin and should last indefinitely; air tube and tire connection best procurable, handle of hard wood, supported on piston rods by solid brass yoke, making it rigid, strong and lasting. This pump as just described is manufactured by C. H. Newton, Newark, N. J., and sells for $10.

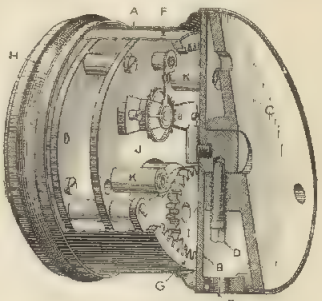
Warren Auto Trunks

The Warren Leather Goods Company, of Worcester, Mass., makes a very complete assortment of automobile tire trunks in black enamel and duck. The line includes many different sizes, styles and finishes. Prices, of course, vary greatly for different styles and finishes.

American Electric Company, State & 64th Streets, Chicago, Ill., has taken over the manufacture of the American Sonoscope, formerly made by the Gaylord Automatic Stropper Company.

Novel Rim Winding and Rim Setting Auto Clock

One of the latest novelties offered the automobilist is the Phinney-Walker Keyless and Rim Setting auto clock, made by the Phinney-Walker Keyless Clock Company, 79 East 130th Street, New York City. These clocks have been on the market for some time and have been recognized as a superior type of clock on account of the rim winding feature. The manufacturers are now, however, going one better by the addition of a device which allows the setting of the hands by simply turning the rim, which is also used to wind the clock.



Sectional View Showing Manner in Which the Winding Feature Works.

The hands are set by pulling the rim forward or up and then turning it to set the hands to correct time. As the rim is released it automatically goes back into correct position, being pulled back by a spring which holds it firmly and tight against the clock and in correct position to wind. This clock is made in a number of styles and is fitted with the well known Seth Thomas works.

French's "Whitire"

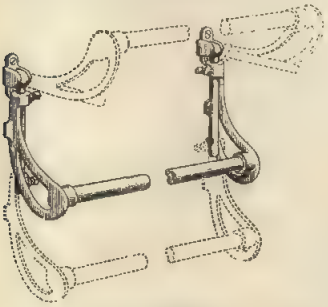
Samuel H. French & Company, the well-known paint and varnish manufacturers of Philadelphia, Pa., have been manufacturing a tire coating under the brand of French's London White "Whitire" which renews and beautifies automobile tires.

French's London White "Whitire" is a rubber coating in powder form which is thinned with clean water, and is used to cement up porous openings and thus prolongs the life of the tire at a minimum cost.

"Whitire" is put up in 4 lb. cans at $1 per can. This can will last several months. It is also put up in small trial tins at 25 cents each, sufficient for one application to four tires, and which will be sent postage prepaid.

Adjustable and Folding Foot Rail

This foot rail is fastened to the floor of the car in the same manner as the staple or standard foot rail and will fold over out of the way. When in the position to be used it can be adjusted, from or toward the passenger to the most comfortable position, without cramping the limbs or sitting in an uncomfortable position. The cut shows how it slides back and forward on the short



The Harper Adjustable and Folding Foot Rail

rods to get the adjustment. When it is on the floor the weight of the foot on the rail binds and prevents it from moving out or in. When wanted in a certain position permanently the set screws are tightened up, holding the fixed position desired. This device is manufactured by T. Harper, Brass Foundry, 139 to 145 Lafayette, corner Howard Street, New York, N. Y.

National Lock Washers

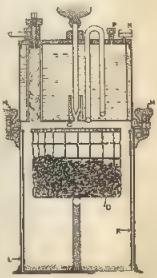
The National Lock Washer Manufacturing Company, of Johnson & Hermon Streets, Newark, N. J., make lock washers like the one shown in the accompanying cut. The dimensions conform to the standards adopted by the S. A. E.

Changes in the Forse Speedometer

The Forse Speedometer, manufactured by the Forse Manufacturing Company, of Pendleton, Ind., has been changed somewhat for 1913, particularly the swivel and ratchet elbow which has been improved by replacing some parts by stronger and much more durable ones. The small, delicate springs and parts which shorten the life of the speedometer have been eliminated. A multi-coil spring wire shaft, protected by a specially designed tubing, is used.

The Sun-Lite Automatic Storage Gas Producer

This machine is adapted for head and search lights for motor cars, trucks and motor boats, and for gas engine starters, double valves being furnished for same. A pressure gage gives the exact condition of the gas supply at a glance, the gas being forced through a filter removing moisture and dust. The cut shows a diagrammatical view of this producer and its operation is explained herewith.



Sun-Lite Automatic Storage Gas Producer.

To charge: Loosen thumb screws M, and remove top part by turning it out of slotted holder. Fill carbide basket D, and replace top part by turning it back into slotted holder. Fill top or water tank at plug P most full of water, about one quart, leaving a little space for gas. Screw water plug P on firmly.

To generate gas: Unscrew thumb knob A a few turns. Lift little ball P five or ten seconds, giving an air vent for the water. This allows the water to flow through valve C, coming in contact with carbide in basket D, generating gas, which passes up through automatic pressure, regulating tube E to bottom of water in tank then bubbling to surface.

As soon as pressure is registered on the gage N, turn thumb knob A firmly to close. The tank is now gas primed and need not be primed again as long as there is a few pounds pressure indicated on the gage, even if tank has been used several times or the full capacity of the charge.

To light: Open valve I, and adjust flame to suit. A steady white, bright flame will continue till valve I is closed or carbide is exhausted.

This device here described is manufactured by the Sun-Lite Automatic Storage Gas Tank Manufacturing Company, of 25 Bramhall Street, Portland, Me.

Rex Velvet Nickel Polish

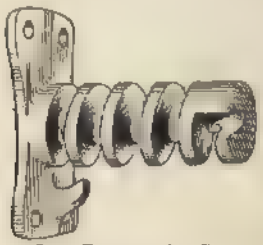
This nickel polish is claimed to prolong the life of nickel plating and is made especially for nickel plated lamps, German silver reflectors and all German silver and nickeled accessories. It is said to polish and preserve the plating and clean and clear all glass parts, such as wind shields, lamp glasses, etc. This substance is manufactured by the Armiger Chemical Company, 2165-2167 Austin Avenue, Chicago, Ill., and comes put up in boxes, at $4.25 per dozen.

Novelties and Specialties

This department brings to the attention of merchants NEW GOODS which are being put on the market. The co-operation of manufacturers is invited and will be valued

No Knot Rope Fastener

The American Novelty Company, 382 Sixth street, Milwaukee, Wis., has put on the market the No Knot Fastener for use in connection with clothes lines and ropes for other purposes in making fast at each end. They are designed not only for securing the ends of



No Knot Line Fastener for Permanent Attachment

clothes lines without the tying of knots, but for holding hammocks, tents, awnings, sails for yachts, punching bags, lawn tennis nets, etc. It serves as a line saver as well as a time saver, and will hold wire lines as well as manila, cotton or other rope. The device is made of selected wood, weather proof finished and also of metal. One spiral is attached permanently with screws at one end and the other, after the line

Fastener for Holding Other End of Line

has been given a few twists to hold it without knotting, is caught by means of the screweye in a hook placed conveniently for that purpose

Flexible Flyers for 1912

For the season of 1912 S. L. Allen & Co., Philadelphia, Pa., are making some changes in their flexible flyers No. 1 will be 38 in. long instead of 36 No. 2 42 in. instead of 40, No. 3 47 in instead of 45, No. 4 52 in. instead of 50, No. 5 63 in. instead of 62, but No. 6, the racer, will be unchanged.

Notwithstanding this increased length, there will be no advance price and the line will be still further improved in other respects.

For 1912 the company will add to the line of Fire Fly Coasters by offering a No. 9 size, 32 in long, which will list for only $1.50. This is offered as a remarkable value as a small sized safe sled for young children.

Wagner Daisy Fly Trap

The Wagner Mfg. Company, Cedar Falls, Iowa, has put on the market the Wagner Daisy fly trap, designed to catch flies out-of-doors. The trap is intended for service in such places as

Wagner Daisy Fly Trap for Catching Flies Out of Doors and in Large Numbers

stores, barns, near garbage cans, stables, or where flies gather in large numbers.

The dimensions of the trap are hight 26 in., and diameter 11½ in It is supplied complete with tops, bottoms, side rods, wire and nails and is shipped knocked down, with the tops and bottoms in one crate and rods and wire in another crate, the traps being packed in quantities of six. A suitable substance for bait, preferably a mixture of sugar, water and vinegar, is placed in the dish under the trap. After the fly has feasted on this lure, it naturally flies upward, alighting on the wire dome above the dish, then crawling upward through the small hole at the top of the dome and finally landing in the trap proper. It is contrary to fly nature to crawl downward, so it is said to be a rare occurrence for a fly to get out of the Wagner Daisy Fly Trap.

Uncle Sam's 3-Coin Register Savings Bank

The Durable Toy & Novelty Company, 44 Union Square, New York, has supplemented its line of banks for 1912 with Uncle Sam's 3-coin register savings bank, patent applied for, which is a good reproduction of a cash register. It locks and unlocks automatically. When the fourth coin has been deposited the bank is locked and when $10 is in the bank it will open. All of the parts are made from cold-rolled steel and the figures are easily discernible, being ½ in. high.

When a nickel is deposited the bill rings once, for a dime twice and when a quarter is dropped in the slot the bell rings five times, at the same in-

Uncle Sam's 3-Coin Register Savings Bank

stant registering the total up to ten dollars. The dimensions of the bank are hight 6 in., width 4 in. and length 5⅛ in. and the plates on the bank are of brass thus making a fine appearance

The Latest Hardware News
—FROM KRAUSE HARDWARE CO—

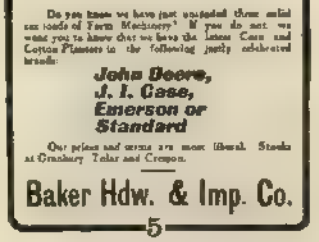
POULTRY NETTING

Reach Baseball Goods Are on Display

Co. s 1912 Catalog Free

GARDEN TOOLS

1



"That Which we Do Not Know is That if we Did Know Would Benefit us Most"

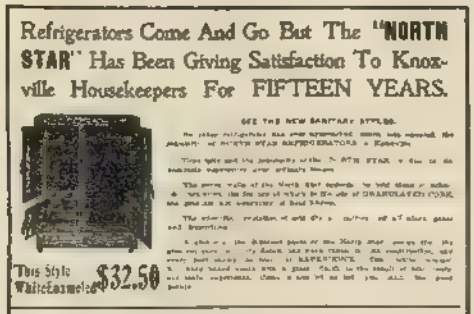
Do you know we have just unloaded three solid car loads of Farm Machinery? If you do not we want you to know that we have the Latest Corn and Cotton Planters in the following justly celebrated brands:

John Deere,
J. I. Case,
Emerson or
Standard

Our prices and terms are most liberal. Stocks at Granbury, Telar and Crowson.

Baker Hdw. & Imp. Co.

5



Refrigerators Come And Go But The "NORTH STAR" Has Been Giving Satisfaction To Knoxville Housekeepers For FIFTEEN YEARS.

SEE THE NEW SANITARY STYLES.

This Style White Enamel $32.50

More Than FOUR THOUSAND "Quick Meal" Ranges In Use In East Tennessee

GET EM AT Woodruffs

2

Boy Scout Knives

POCKET KNIVES

A. W GODDARD

4

PAINT

I HAVE A GOOD ONE

A Strictly Pure Linseed Oil Paint

TRY IT

Wear Proof Liquid Paint

USE IT

Have it for every purpose for your House, Barn, Floors and Interior Wood Work, also varnishes and finishes for your furniture and floors.

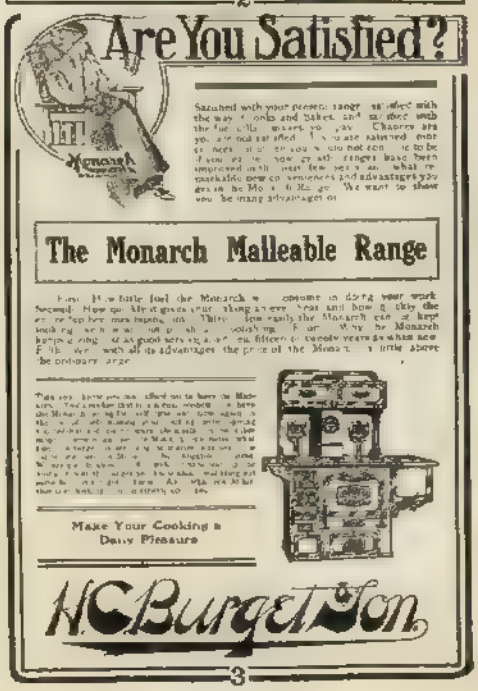
PRICE $1.75 GALLON

Special price for house jobs.

A Complete Line of Brushes

M. A. Benson, Syracuse, Michigan

6



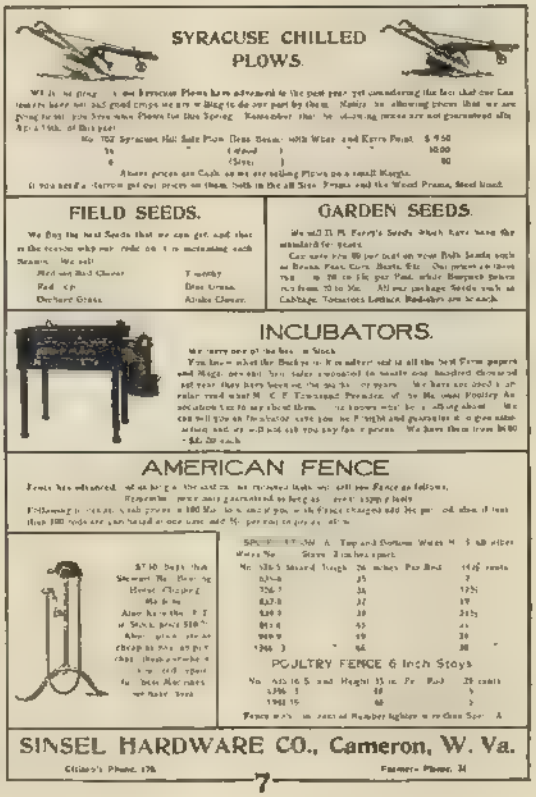
Are You Satisfied?

The Monarch Malleable Range

Make Your Cooking a Daily Pleasure

H. C. Burget Son

3



SYRACUSE CHILLED PLOWS

FIELD SEEDS.

GARDEN SEEDS.

INCUBATORS.

AMERICAN FENCE

POULTRY FENCE 6 Inch Stays

SINSEL HARDWARE CO., Cameron, W. Va.

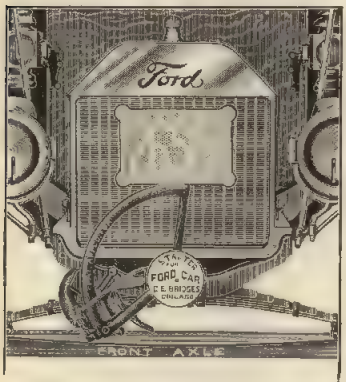
Citizen's Phone, 178 Farmer- Phone, 31

7

Bridges Starter for Ford Cars

The Bridges Starter is a mechanical device that is claimed to be positive and turn the motor over twice as far as a pull on the crank. The motor is started with such little effort, it is said, that you will shut off when you stop for only a moment. The device is attached in the following manner:

Remove crank by driving the 5-16 in. pin out of ratchet. Insert starter shaft and put same pin back in ratchet, thus attaching starter shaft. Be sure to put in spring



Bridges Starter As Applied To Ford Car.

before inserting shaft. Fasten chain guide to frame with staple, putting locking washers and nuts on outside and inserting block in frame above car spring. Bore ¾ in. hole through dash, 2 in. below and 2 in. to right of lower corner of vibrator box. Insert chain tube and if edge of drip pan interferes, bend in slightly. Insert lower end in tube of guide and tighten screw. Put on chain clutch and run chain down through tube and fasten to pulley section, and the starter is ready for use.

The Bridges starter is manufactured by C. E. Bridges, Manufacturer, 169 N. Jefferson Street, Chicago, Ill., and sells for $12 complete.

Ruby Chemical Company, Johnstown, O., on account of rapid increase of its business, has moved to 157 West State Street, Columbus, O.

P. M. Marko & Company, Brooklyn, N. Y., has issued a pamphlet describing the care of its Marko Storage Batteries for lighting and ignition. It also mentions the capacity and endurance of this battery.

The Rajah Giant Plug

The porcelains used in these plugs are of high grade hard fibre, made very large and strong to withstand all kinds of hard work and other heavy duties. The metal parts including the shell and bushing are also large and strong to correspond with the porcelain. The threads on the steel shell are accurate within the limits recommended by the S. A. E. The center electrode and the ground electrode are made of a special alloy of imported wire, to withstand the strongest magneto spark and are of a generous size. The lower end of the steel shell is specially designed to give the greatest possible amounts of protection to the porcelain, reducing to a minimum the possibility of a short circuit in engines using an extraordinary amount of oil. The plug consists of four parts, namely, the imported porcelain, a brass bushing, inside

Rajah Giant Plug.

The Rajah Self-Starting Plug. This is made in the same manner as the Giant plug with the addition of the priming device.

copper asbestos gasket and a steel shell. The button top feature of the Rajah plug adds greatly to its simplicity as in connection with the Rajah clip terminal there is no necessity for thumb screw or such device.

This plug as herein described and herewith illustrated is manufactured by the Rajah Auto Supply Company, Bloomfield, N. J.

The Gasket Supply Company, of Philadelphia, Pa., has doubled its floor space and equipped itself with new machinery and additional power, and has launched into the heavy automobile stamping business.

Sands Folding Lavatory

This folding lavatory, made by A. B. Sands & Son Company, 22-24 Vesey Street, New York City, is of nickel plated copper and built especially for use in automobiles where space is limited. It is made in different woods, to match interiors, and is fitted with a self-closing swing pattern faucet and nickel plated copper shelf for towels and toilet articles.

Sands Folding Lavatory.

The water supply is taken from a tank placed on the roof or under the car body. This particular lavatory is constructed to be fastened to the back of the front seat. The dimensions closed are 22¾ in. high. 13¼ in. wide and 4½ in. deep. The weight is 18 lbs. Price, according to finish.

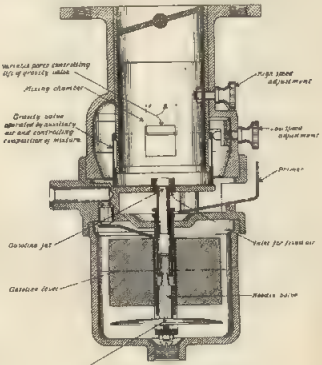
Mogul Auto Owners Tire Outfit

There is put on the market a tire outfit for auto owners which is manufactured by the Mogul Tire Company, 510 Pine Street, St. Louis, Mo. This outfit consists of one or more inner tubes, the same number of liners, which are good for strengthening the old tires, as well as new ones, inner shoes used in case of a blow-out or replacing a tire. The simple and practical vulcanizer for vulcanizing cuts and tears in tires and to vulcanize inner tubes instead of cementing them, is also included in the outfit together with extra raw rubber for vulcanizer.

Wallace Automatic Carburetor

This carburetor, which is manufactured by the Lucas-Wallace Manufacturing Company, Paducah, Ky., has but one moving part. This is an annular gravity valve, which controls the engine mixture. At very low engine speeds the vacuum in the valve chamber is nearly equal to the vacuum in the mixing chamber. As the speed of the engine increases and the valve rises, by means of the tapers in the walls of the valve chamber, the opening for the admission of air to the valve chamber becomes larger, while the opening through which the air is drawn out becomes smaller, causing the degree of vacuum in the valve chamber, in effect, to fall off, and the valve to become heavy. In this way the valve is caused, at all speeds, to assume a position with reference to its seat, which furnishes the correct amount of air.

The fixed air, heavily charged with gasoline, is drawn up into the mixing chamber in the center of the carburetor. The same annular valve which governs the amount of this over rich or primary mixture, also controls the amount of auxiliary air admitted to dilute the primary mixture to the proper



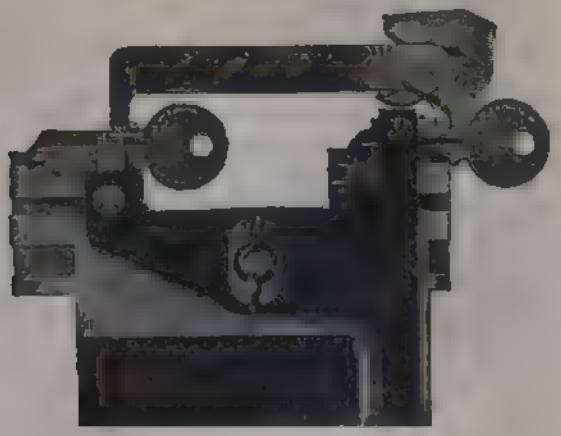
The Wallace Automatic Carburetor

composition. By causing the fuel to be lifted for a considerable distance before it overflows the nozzle, they are enabled to use a high air velocity at low speed.

The needle valve rests on the combined barometer and thermostat which raises and lowers it and opens or closes the opening around the needle valve just the right amount to compensate for changes in air pressure or temperature. The action of this barometer and thermostat is entirely automatic.

This carburetor as described comes in sizes from ¾ in. to 1⅛ in. and in price from $16 to $25.

IMPROVED KEY JIGS



Indispensable Wherever Pin Tumbler Locks are used

With this simple but perfect Tool Corrugated Grooved or Bent Keys can be duplicated Saves time, money and trouble With it one cannot spoil a blank or injure a pattern key

Above is a front view of the jig with a Yale paracentric key and blank in position for filing first notch.

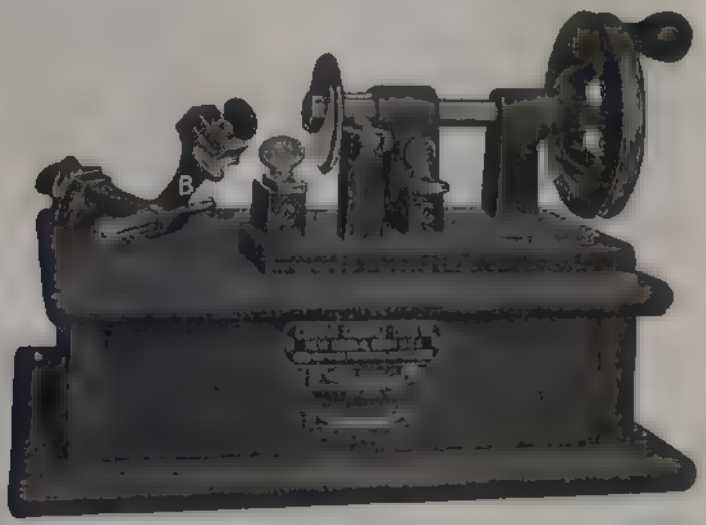
The pins are adjustable to take up wear or correct inaccurate adjustment and the set screws are to compensate for variation in thickness of keys and blanks

Each

No. 1—Made of Steel, Japanned Finish, 4⅝x3¼ in..... $8 00

Packed one in a Box; Weight One Lb.

AUTOMATIC KEY DUPLICATING MACHINES AND ASSORTED KEY BLANKS



Per Assortment

Assortment No. 9101 Contains above Machine and One Gross Assorted Pin Tumbler Blanks, The Machine is 9x6x5½ inches High, and is Mounted on a Handsomely Finished Hardwood Cabinet, containing two Drawers for Locksmith's Repair Tools and Assorted Blanks Can be operated by either Hand or Belt, Full Directions for operating sent with each Machine, Cuts Keys for all Standard Cylinder Locks; Weight 75 Lbs. per Assortment..... $30 00

AUTOMATIC KEY DUPLICATING MACHINES WITHOUT KEY BLANKS

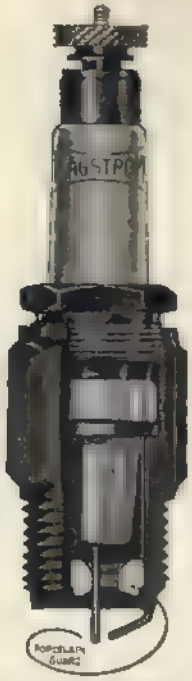
Each

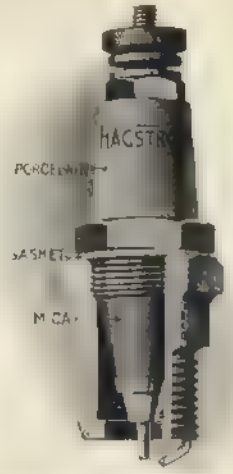
No. 91—Machine only, no Keys, as described and illustrated above $25 00

Weight 50 Lbs. Each

AUTOMOBILE AND MOTORCYCLE SUNDRIES

HAGSTROM'S SPARK PLUGS





Hagstrom motorcycle spark plug, a combination porcelain and mica plug scientifically constructed

Each $1 00

Hagstrom's porcelain guard spark plug standard A. L. A. M. and metric, each $1 00

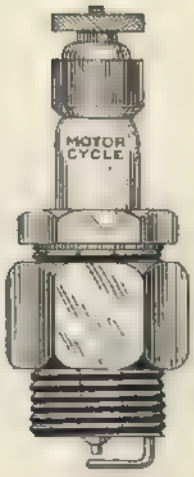
The porcelain is hand turned, the gaskets are of Canadian long fibre asbestos, the electrode points of such fine alloy that only pure platinum can deliver a spark of equal efficiency

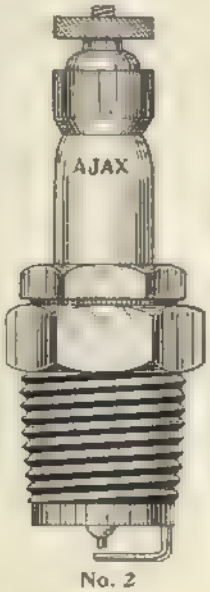
VITAL SPARK PLUGS

Vital spark plugs made in three sizes, ½ inch, ⅜-18 and metric, each $1 00

The ⅜-18 is sometimes called A. L. A. M. These plugs are simple in construction, the electrode is one solid piece of nickel steel, the porcelain is of correct design and of a size and quartzlike texture to withstand the most severe usage. To prevent leakage an asbestos lined copper gasket is placed between the porcelain and shell, a copper washer under head of electrode.

AJAX SPARK PLUGS





No. 4 Motorcycle — **No. 3** — **No. 2**

No. 4. Motorcycle metric threads, only either porcelain or mica, each $0 75
No. 3. Standard, A. L. A. M. and metric threads, mica screw top, each 75
No. 2. Standard, A. L. A. M. and metric threads, porcelain, screw top, each 75

CASTELLATED NUTS AND CAP SCREWS

S. A. E. Standard

S. A. E. Standard

In Assortments

Castellated Nuts S. A. E. standard, per box $1.50

Assortment contains 50 nuts as follows

Size, in.	¼	5/16	⅜	7/16	½	9/16	⅝
Quantity	2	4	20	7	12	2	3

Cap Screws S. A. E. standard per box $1.45

Assortment contains 25 cap screws as follows:

Size, in.	¼	5/16	⅜	7/16	½	9/16	⅝
Quantity	2	4	11	2	3	2	1

AUTOMOBILE AND MOTORCYCLE SUNDRIES

SCHRADER VALVES

Schrader valves and stems complete, per dozen..... $2 00
Stems only, per dozen . 50
Valves only, per dozen..... 1.00

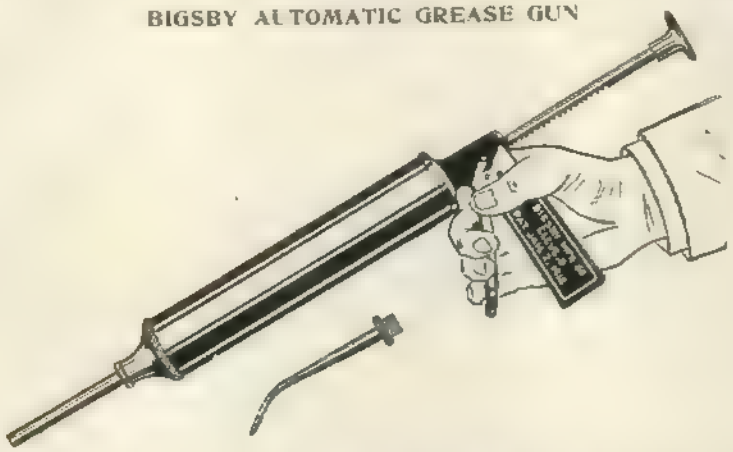
Schrader's Valves for Bicycles

Schrader's valves and stems complete, per dozen $2 00
Stems only, per dozen .. 50
Valves only, per dozen . . 1 00

Schrader Valves Without Dust Cap

No. 777. For 2½, 3, 3½ in tubes per dozen . $4 80
No. 725. For 3½, 4, 4½ 5 in tubes per dozen . . 6 00

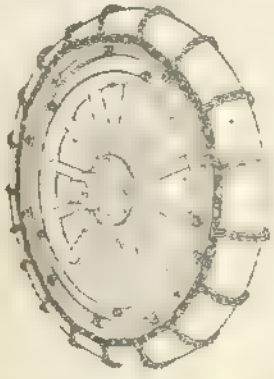
BIGSBY AUTOMATIC GREASE GUN



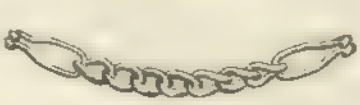
The Bigsby Automatic Grease Gun.... . . . . each, $

This gun is used like a pistol or like a syringe for forcing heavy grease or lubricants into the working parts of automobiles, engines and all sorts of machinery. Making it possible to oil wearing parts not readily accessible. A metal piston ring is used, no leather washers. All parts made of rust resisting metal.

WEED CHAIN TIRE GRIPS



CROSS CHAINS



Cross Chains, size	2½	3	3½	4
Each	$0.05	.06	.08	.09
Size	4½	5	5½	6
Each	$0 10	.12	.15	.18

ADJUSTERS

Size 28, 30, 32, 34 and 36, per pair.....$1 00
Size 37, 38, 40 and 42, per pair..... 1.50

Price List of Weed Chain Tire Grips

Weed chains are attached without the use of a jack or other tools. Do not wire loose ends of side chains under fully cut them off.

Size, in	28x2½	30x2½	28x3	30x3	32x3	34x3	36x3	28x3½	30x3½	32x3½	34x3½	36x3½
Price	$3 50	3 75	4 00	4 50	5 00	5 50	6 00	4 50	5 00	5 50	6 00	6 50
Size, in	30x4	31x4	32x4	33x4	34x4	35x4	36x4	37x4	40x4	30x4½	32x4½	34x4½	35x4½	36x4½
Price	$5 50	6.00	6 00	6 50	7 00	7 50	7 50	8 00	10 00	6 50	7 00	7 50	8 00	8 00
Size in	37x4½	38x4½	40x4½	42x4½	34x5	35x5	36x5	37x5	38x5	39x5	40x5	36x5½	37x5½	38x5½	38x6	40x6
Price	$8.75	9 50	11.00	12 50	8 50	9 00	9 00	9 75	10 50	11 25	12 00	12 00	13 00	14 00	14 00	15.00

A Famous Line of Motor Lamps

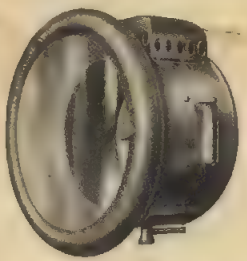
Don't take chances with inadequate lighting systems. Be on the **sure** side—with Solar Lamps.

14 years of use and abuse have demonstrated the superiority of Solars. Authorities today pronounce them the most efficient lamps made.

Solarclipse

Solar Lamps

Most brilliant, most durable, and with an elegance born of **extreme simplicity,** these economical lamps are their own most powerful selling argument.



Torpedo Type

Heat and moisture-proof finish, and a wonderful patented system of double-ray light projection giving two separate and distinct fields of light, are but two exclusive features. There are many others—all described in the catalog.

Solars are built for gas, oil, electricity or in combination. The greatest line of all-purpose motor lamps in the world.

Write for Catalog

Get our Liberal Dealers' Proposition

The Badger Brass Mfg. Co.

Kenosha, Wis. **New York City**

14-candle power acetylene flame—height 3½ inches, weight ready for use 6 oz. Can be carried in cap or belt leaving both hands free. No oil, glass, wicks or breakable parts. Safe simple guaranteed perfect.

Price $1.00 in Brass
Polished Nickel $1.50

Machinists Anglers
Gig Fishers Coon Hunters

850% Increase In Sales During 1911 Over 1910

Advertising campaign for 1912 to 6,000,000 sportsmen
Half and quarter pages in

Hunter-Trader-Trapper	**Outdoor Life**
Boy's Magazine	**Outer's Book**
American Boy	**Field & Stream**
Nat'l Sportsman	**Leslie's Weekly**
Popular Magazine	**Camp & Trail**
Collier's Weekly	**Outing**
Argosy	**Rod & Gun**
Trapper's World	**Canadian Courier**

BALDWIN CAMP LAMP

We furnish dealers free electros for newspaper advertising, booklets for circularizing, extra "self-selling" cartons for window display, cards for window display

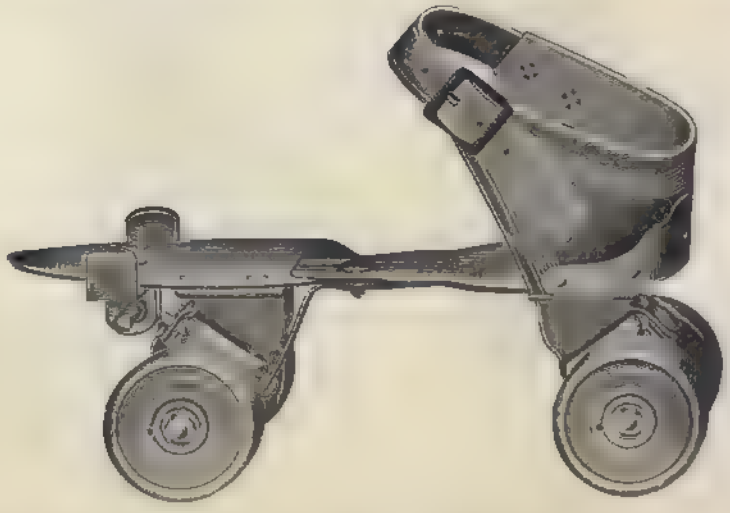
The lamp sells on sight to

Campers Canoeists Possum Hunters Trappers
Boatmen Turkey Hunters Boy Scouts
Big Game Hunters Bands and Marching Clubs

JOHN SIMMONS COMPANY

16 Franklin Street, New York City **35 St. Nicholas Street, Montreal Canada**

ICE ROLLER SKATES ALL STYLES



UNION HARDWARE CO.

TORRINGTON, CONN.

NEW YORK OFFICE: 95 Chambers St.

HERE THEY ARE

THE FINEST PORCH and LAWN SWINGS on the MARKET
BEST VALUES. FASTEST, EASIEST, SELLERS. BIGGEST PROFITS

Go no further. We have just the line you want. Read what we offer you.

Telescopic Assembled Lawn Swing

Same Swing Folded

Telescopic Assembled Lawn Swing

The Quick Set Up One Bundle Swing

Seats four. Equipped with noiseless bearings. Swings easier, due to knife edge hangers and large hooks. Adjustable seats, high derrick, spread 8 ft. 3 in. x 5 ft. Length of hanger 7 ft. Seats 35 in. Can be easily and quickly set up. Ships in one compact bundle. Better, safer than old way.

AUTOMOTE PORCH SWING

Virtually swings itself. Adjustable to any ordinary height ceiling. Noiseless bearings, automatic foot rest prevents marring of floors and ladies' skirts dragging on floor. Swings easier and smoother than any other swing. Made of oak—no side motion—children cannot tip it over. Occupies very little space. Dimensions—40 inches between arms, 44 inches over all. Occupies space 36 x 44 inches.

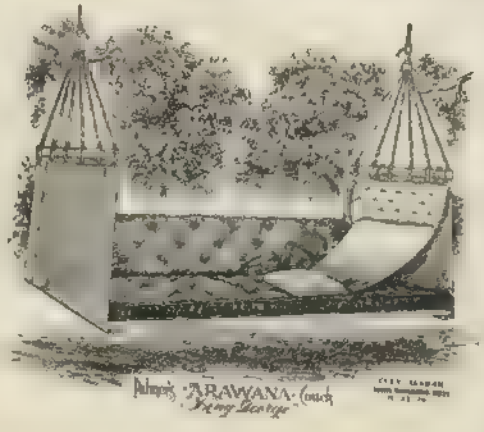
Can be hung with all chains, as shown, or rods substituted for seat chains

"Automote" Porch Swing

Write today for full particulars and prices of above swings. We make a complete line of swings and will send printed matter on request.

NORTH VERNON LUMBER CO.
Dept. 6, NORTH VERNON, INDIANA

The Palmer Hammocks and Couch Hammocks



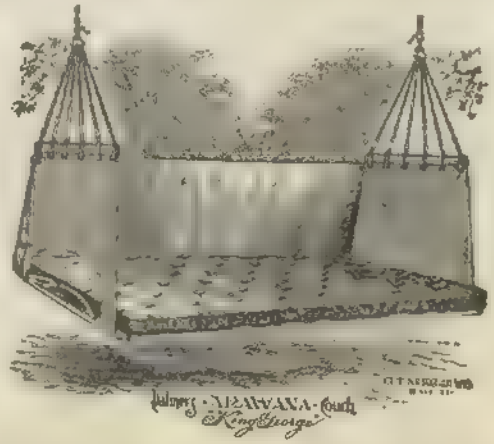
The luxurious King George, with back raised, can be used as a settee; or, with back lowered flat, as a couch.

This is one of four different constructions in our couch hammock system. Several varieties in each construction.

We manufacture also over one hundred varieties of Arawana Swinging Hammocks.

The original, largest and best equipt Hammock Plant in the country.

Send for catalog illustrated in colors.



Also manufacturers of Mosquito Canopies, Nettings, Crinoline Linings, Horsefly and Minnow Nettings, and Window Screen Cloth, Dyeing, Sheer and Swiss Finishing.

The I. E. PALMER CO.
MIDDLETOWN CONNECTICUT

New York Office, 55 Worth Street

TIN FRUIT CANS

Plain Top

Indexed Top

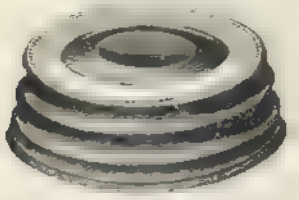
I. C. to seal with wax

Plain Top, one quart, per gross.... $
Indexed Top, one quart, per gross

One gross in a crate

FRUIT JAR CAPS

MASON

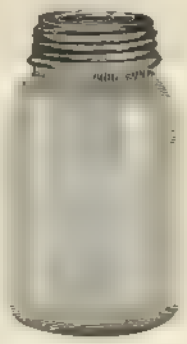


Mason's Zinc jar caps, porcelain lined without rubbers, per gross ..... $

WHITE CROWN

White Crown fit on Mason jar, per gross $....
These caps seal by vacuum, they are applied by screwing on same as Mason caps.

GLASS FRUIT JARS



Ball-Mason size . Pt Qt 2 Qt
Per gross ..... $.

These jars are made from the best material and have rubber extra, Good packed in heavy double corrugated strawboard.

FRUIT JAR RUBBERS

POMONA

Pomona rubbers are heavy, being cut 18 to the inch, for any Mason jar, per gross..... $

One dozen in a carton, two gross in a container

WHITE GIANT

White Giant rubbers are unusually heavy, wide in flange and double thick, made from exceptionally good material, per gross..... $

One dozen in a carton, two gross in a container

TIN JAR CAPS

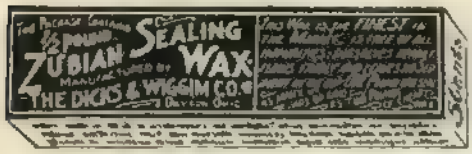
FOR STONE JARS

Diameter, in. 2 3 4
Per gross . . . . $.

FOR GLASS JARS

Diameter, in. 2⅞ 2⅞ 2⅝
Per gross, without wires.....$.....

SEALING WAX



Zubian, Bright Red

In ½ lb. bars, per pound.....$

5 lbs. in a package, 30 lbs. in a box

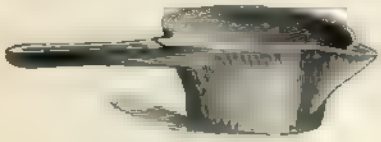
J. R. K. Brand, Red

Kelch Old Fashioned

In ½ lb. bars, per pound.....$

5 lbs. in a package, 30 lbs. in a box

SEALING WAX LADLES



Coppered Finish

No. 2. Extra large, per gross.....$16 40

One gross in a case

FLATIRON WAXER

CLEANER AND POLISHER

Honeycomb waxed pad, diameter 5 in., ½ in. thick, per dozen $1 00

Polishes irons that are rough, rusty and sticky

One dozen in a box

BRASS STRAINER CLOTH

12 x 60 in.

Nos. (mesh)	40	50	60	70	100
Per roll .....$	....	....	....	....	....

FRUIT JAR WRENCHES

No. 190. Sure grip, all steel, plain finish, a very serviceable wrench per dozen $1 90

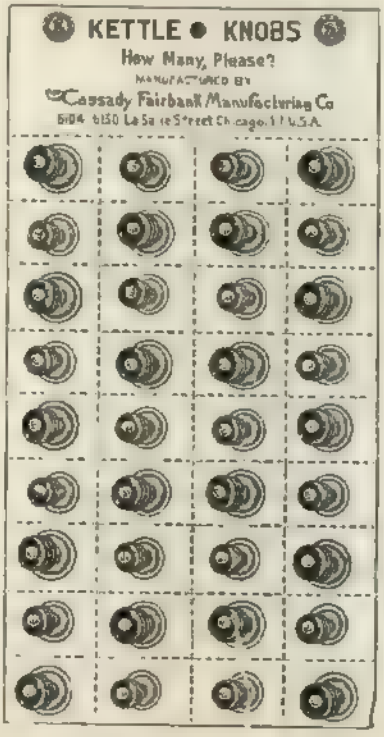
One dozen in a carton, six dozen in a box

KETTLE KNOBS

Illustrations two-thirds actual size

Wood handle, enameled Black, 1⅝ in. screw bolt, two tin washers and nut

Kettle Knobs, two sizes, 50 of each in a box, per box..$1.00

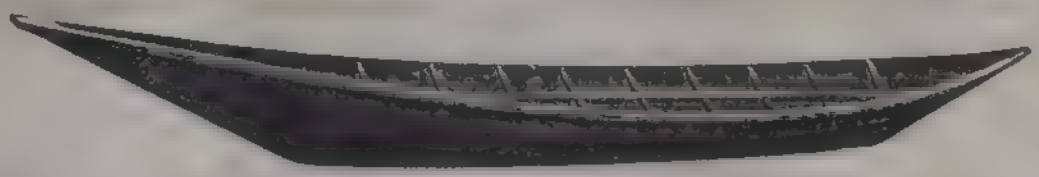


Card Assortment

Kettle Knob Assortment, per card.. .. .. .

DRIVING BATTEAUX

FOR FACTORY SHIPMENT ONLY; SHIPPED KNOCKED DOWN TO SECURE LOWEST FREIGHT RATES



For use of Lumbermen and Contractors in Log Driving, Pond and Construction Work where necessary to transport men, Material etc., it will carry large heavy loads and is easy to handle in swift rough water. Built of good, sound White Pine, the Bottom 1⅛ in. Thick, the Sides ⅞ in. thick; the Knees or Ribs are Oak sawed to shape from Natural Crooks.

The small size or Three Strake (three boards high, will carry 12 to 18 Men and Driving Kit, the Four Strake (four boards high, will carry 15 to 26 Men and Driving Kit.

	Each
No. 332—Three Strake, 32 ft. Long, Weight 350 Lbs.	$60.00
No. 334—Three Strake, 34 ft. Long; Weight 390 Lbs.	64 00
No. 336—Three Strake, 36 ft. Long, Weight 430 Lbs.	68 00
No. 432—Four Strake, 32 ft. Long; Weight 400 Lbs.	62 00
No. 434—Four Strake, 34 ft. Long, Weight 440 Lbs.	66 00
No. 436—Four Strake, 36 ft. Long; Weight 475 Lbs.	70 00

Shipped Knocked Down to Secure Lowest Freight Rates; 34 and 36 foot Batteaux are built to order only

MAPLE BATTEAU PADDLES

Selected Straight Grain Rock Maple; Blade Tipped and Pointed with Steel

	Each
No. BM7—Length 7 ft.; Weight 4¾ Lbs. Each	$3 00
No. BM7½—Length 7½ ft., Weight 5 Lbs. Each	3 25

CAPSTANS

COMBINED CLEAT OR CAVEL AND HAND CAPSTAN

Indispensable in handling and managing tow lines on boats or barges; for a side tow, place one at the bow and one at the stern, for a bow tow two pulling [illegible] on each one forward, will handle up to tows of from 500 to 800 Lbs. Is frequently used to haul small craft and barges out on the ways and when placed at suitable intervals along docks or wharves or about boat yards, require but little space; use affords a sense of security which is well worth their cost. Secure to deck by four bolts through hardwood plank, spanning two or more beams below, single purchase and revolve with the sun. Slack in line can be taken up at once if there is too much slack, take in by hand, then relay the line on the horns, the same as on a Cleat or Cavel and it is ready to haul [illegible]. The levers for these capstans are usually made of one and one-half inch wrought iron pipe, about four feet long.

	Each
No. 1—Height 17½ in., from Top to Tip of Horns 16½ in. Base 14½ in. Diam., Shaft 4½ in. Diam., Neck at Spool 5 in. Diam.	$20 00

Weight 110 Lbs. Each

ANCHORS

Japanned Cast Iron, Solid Stock, and Flukes, Sliding Bar

	Per Pound
Weight 20 Lbs. Each	$0 15
Weight 25, 30, 40, 50, 60, 70, 80, 90, 100, 120, 130 to 150, 150 to 180, 180 to 200, 200 to 250 Lbs. Each	14
Weight 300 Lbs. Each	14

DIRIGO FOLDING ANCHORS

Galvanized Iron

Stock and Flukes both fold up and are held open or closed by the same Pin; very compact, for stowage on Deck or elsewhere.

Weight, Lbs.	4	6	8	10	12	16	20	26
Length, In.	17	20	22	24	25	28	30	[illegible]
*Each	$2.50	3.00	4.00	5 00	6 00	7 00	9 00	10 40

*Open Stock

CAR DOOR LUMBER ROLLERS

SIDE DOOR ROLLERS

OSHKOSH DOUBLE EXTENSION

Extends to fit Car Doors from 4 ft. 6 in. to 8 ft. 2 in.

	Each
No. 118—Steel Pipe Bar, 18 in. Wood Roller	$13 00
No. 114—14 in. Iron Roller, otherwise same as above	14 00
No. 218—18 in. Iron Roller, otherwise same as above	15 00

Average Weight 40 Lbs. Each
Nos. 114 and 218 Not Carried in Stock

WERDEN EXTENSION

Extends to fit Car Doors from 4 ft. 8 in. to 7 ft. Wide

Each

No. 48—Bar is made of 2 in. Angle Steel, Steel Tube Roller with Metal Heads, all Malleable Iron Castings; Extension is easily and quickly made; Weight 40 Lbs. Each $15.00

END DOOR ROLLERS

Each

No. 12—Length over all 13¼ in., Length of Roll 12 in.; Steel Tube Roller with Hardwood Frame, Iron Bound; Secured to Door Sill by Heavy Clamps $7 50

Open Stock; Weight 14 Lbs. Each

TIMBER TRUCKS OR DOLLIES

Used to shift and swing timber, etc.; for piling lumber, loading timber and railroad iron on flat cars and boats, unloading vessels and in the construction of iron buildings, bridges, etc.; shifting of machinery or heavy boxes.

Each

No. 7—Hardwood Frame 18x16 in. of 2½ in. Rock Maple; Cast Iron Roller 6x10 in.; Weight 31 Lbs. Each $8 00

BOOT CALKS

COMMON, LUFKIN

Bright, Beaded; Forged from Best Quality Crucible Steel

A Pair of Boots takes 100 Calks, 40 in each Sole and 10 in each Heel. Applied with Calk Sets shown below; the 00 Size is used in walking boots by Cruisers, Sportsmen, Miners, etc.

Nos.	000	00	0	1
Length, In.	¼	¼	¼	⅜
Weight, Lbs., per 1000	2¾	3	3¼	4¼
Per 1000	$7.50	7.50	7.50	7.50

100 in a Box; 1000 in a Carton

LIPSCOMB WING SCREW CALKS

Best Tempered Steel

For Loggers, Hunters, Woodsmen, Ice Cutters, the various sports, for rough weather, and for any purpose requiring a roughened sole. Can be easily inserted or removed with the special wrench. Does not pull out nor work into the foot. Always held upright by broad disc, which prevents bending in wet or inferior leather. 50 of these Calks will give safer service than 125 driven Calks.

Nos.	00	4	5	7	8
Length, In.	¼	⅝	¾	⅞	1
Weight Lbs., per 1000	5	5½	6	6¼	6¼
Per 1000	$15.00	15.00	15.00	15.00	15.00

50 in a Box; 500 in a Carton

Note—We will always send Lufkin Calks unless otherwise specified.

CALK SETS

For Common Calks Shown Above

Per Dozen

No. 185—Set only; Length 2½ in., Polished Steel $3 50

One Dozen in a Box; Weight 1¼ Lbs. per Dozen

Per Dozen

No. 190—Combination Set and Punch; Length 4½ in., Polished Steel $4 50

One Dozen in a Box; Weight 2 Lbs. per Dozen

CALK SETTING TOOLS

For Lipscomb Calks Shown Above

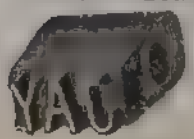
BRACE

Per Dozen

No. 01—Polished Cast Steel, 7½ in. Long $4.00

Half Dozen in a Box; Weight 5 Lbs. per Dozen

LOG STAMPS OR MARKING HAMMERS



Each

For marking Name, Initials or Private Mark on the ends of logs Cast Steel; with from Two to Six Double Face Letters, 3 in. High; Size of Eye ⅞x1⅛ in., without Handle, takes Common Sledge Handle $1 25

Add $3 00 Net for Cost of Each Pattern

Weight 3 Lbs. Each

Specify whether Single or Double Face is wanted.

WRENCH

Per Dozen

No. 02—Used as a Wrench, with the Bar, and is very Handy to Carry in the Pocket, can also be used in a Common Bit Brace; Blued Steel, Length 3 in. $3 00

One Dozen in a Box; Weight 1¼ Lbs. per Dozen

BLACKSMITHS' TONGS

No. 1360—STRAIGHT LIP PATTERN

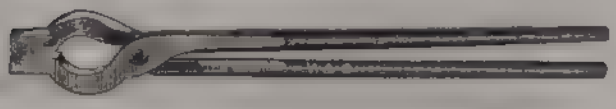
Drop Forged, Solid Steel, Oil Finish; Used in all kinds of Forging.

Length In.	18	20	22	24	26
Weight Dozen, Lbs.	22½	30	36	45	50
Per Dozen.	$6.70	7.20	7.70	8.90	10.60

No. 1370—BOLT TONGS

Drop Forged, Solid Steel, Oil Finish; Curved Lips for Holding Bolts and Round Iron.

Size Bolt, in.	¼	⅜	⅜	½	⅝	¾	⅞	1
Length, In	18	18	20	20	22	22	24	24
Wt. Doz., Lbs.	22	24	25	27	32	34	38	40
Per Dozen.	$10.00	10.00	13.50	13.50	15.00	15.00	16.80	16.80



No. 1390—GAD TONGS

Drop Forged, Solid Steel, Oil Finish; For General Forging Purposes.

Length, In	20	24
Weight Dozen, Lbs.	27	41
Per Dozen.	$10.50	13.50

PICK UP TONGS

For Picking up Hot Irons

Per Dozen

No. 1380—22 in. Long, Drop Forged, Solid Steel, Oil Finish; Weight 34½ Lbs. per Dozen. $15.00

All Above, Open Stock

CHAMPION CLINCH TONGS

HELLER HORSE NAIL CLINCHERS

Especially Useful in Clinching Nails on Colts or Nervous Horses; Solid Cast Steel, Full Polished

Round End

Per Dozen

No. 30—Length 14 in.; Adapted to any Angle of the Foot; Weight 21 Lbs. per Dozen $26.40

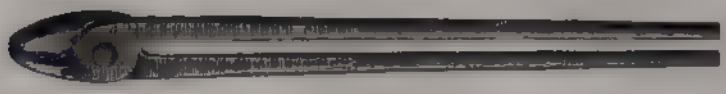
Straight End

Per Dozen

No. 29—Length 14 in.; Weight 21 Lbs. per Dozen $26.40

Half Dozen in a Box

BLACKSMITHS' TONGS



No. 31—HORSESHOERS' OR FARRIERS' FORGING

Heavy Pattern; Drop Forged, Solid Steel, Oil Finish; Designed Especially for use in Forging Horse Shoes.

Length, In.	12	14
Weight Dozen, Lbs.	19½	21
Per Dozen.	$6.00	6.00

BLACKSMITHS' HEADERS

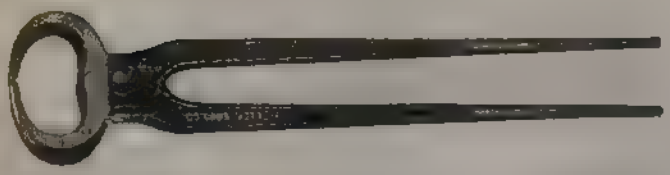
No. 1280—ROUND HOLE

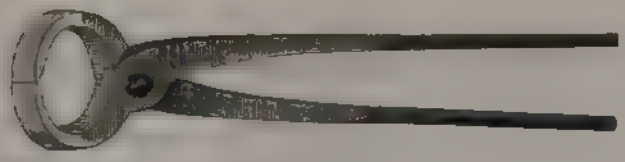
Highest Quality Solid Cast Steel; Oil Finish; Used to Slip Over Bar of Iron or Steel while Head is being Forged; Measurement Given is Size of Holes.

Size, In.	¼	⅜	⅜	½	½	⅝	¾	⅞	1	1¼
Weight Each, Lbs.	2⅜	2¾	2¾	2¾	2¾	3	4	4	4½	4½	4½
Per Lb., All Sizes.										$0.42

Open Stock

FARRIERS' TOOLS





BLACKSMITHS' PINCERS

Designed for Farriers' use in pulling off Horseshoes and pulling Nails from the Hoof

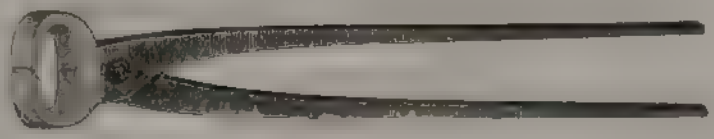
HELLER, CRUCIBLE STEEL, Oil Finish, Polished Jaws

	Per Dozen
No. 21—12 in.; Weight 23 Lbs. per Dozen.	$18 00
No. 20—14 in.; Weight 33 Lbs. per Dozen.	24 00

Half Dozen in a Box

TOOL STEEL
Oil Finish, Polished Steel Jaws

	Per Dozen
No. 12—12 in.; Weight 22½ Lbs. per Dozen.	$10 00
No. 14—14 in.; Weight 33 Lbs. per Dozen.	12 00



HOOF PARING OR NAIL CUTTING NIPPERS

For General Use by Farriers in Cutting and Paring Horses' Hoofs and for Cutting Nails

HELLER, CRUCIBLE STEEL, Full Polished

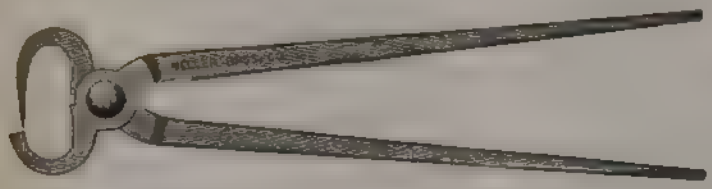
	Per Dozen
No. 24B—10 in.; Weight 12¾ Lbs. per Dozen.	$19 20
No. 24A—12 in.; Weight 20 Lbs. per Dozen.	24 00
No. 24 —14 in.; Weight 28 Lbs. per Dozen.	28 80

Half Dozen in a Box

TOOL STEEL
Oil Finish, Polished Jaws

	Per Dozen
No. 30—12 in.; Weight 20 Lbs. per Dozen.	$24.00
No. 32—14 in.; Weight 26 Lbs. per Dozen.	26 00

Half Dozen in a Box



HELLER HOOF PARERS, Refined Clay Crucible Steel, Full Polished

	Per Dozen
No. 23A—12 in.; Weight 21 Lbs. per Dozen.	$24 00
No. 23 —14 in.; Weight 30 Lbs. per Dozen.	28 80

Half Dozen in a Box

CHAMPION HOOF CLINCH NIPPERS

Jessop's Steel Blades, Polished Head, Enameled Malleable Handles; All Parts Interchangeable

Used for Cutting Horses' Hoofs and Nail Clinches Per Dozen
No. 012—Length 12 in.; Weight 23 Lbs. per Dozen. $24 00
Quarter Dozen in a Box

HOOF PARING OR NAIL CUTTING NIPPERS

V and B, Solid Steel, Oil Finished, Special Tough Temper, Polished Jaws

	Per Dozen
No. 42—12 in. Long, Weight 20 Lbs. per Dozen.	$24 00
No. 44—14 in. Long, Weight 26 Lbs. per Dozen.	28.80

Half Dozen in a Box

BLACKSMITHS' BUTTRESSES

	Per Dozen
No. 1—Length 17½ in. Over all; Polished Steel Blade, 2 in. Wide; Wrought Iron, Japanned Shank; Plain Hardwood Handle	$7 25

Quarter Dozen in a Package; Weight 15 Lbs. per Dozen

FARM LEVELS

BOSTROM IMPROVED

For all kinds of drainage work including tile or underdraining, also open drains or ditches all kinds of irrigating work including canals and laterals terracing land, road building, house foundation work, grading of all kinds, setting fence posts, running fences, getting angles and every sort of work requiring a level This Instrument is as accurate as a Surveyors Level, yet it is so simple that anyone with ordinary intelligence can operate it correctly with little practice.

Achromatic Telescope has range of ½ mile in any direction, and has Six Magnifying Lens with absolutely accurate and immovable Cross Hairs. The Turret carries the Telescope and Spirit Bubble by which the Level is adjusted and revolves so that the Instrument may be pointed in any direction desired without readjustment The Target Rod is telescoping varying from five to nine and one-half feet graduated in feet, inches and hundredths The Target is the regular surveyors form sliding up and down the rod with a thumb screw for clamping in any desired position The Plumb Bob adapts Level to the use of architects, contractors and builders The Tripod consists of three wooden Legs with Head for receiving the Adjusting Head The Adjusting Head has Three Adjusting Screws for bringing the Face Plate and Level to a perfectly horizontal position with these Three Screws accurate adjustment may be obtained by any one with no experience or technical training The Face Plate is divided into a Graduated Circle of 360° making it possible to get any angle desired.

	*Each
No. 812B—Level Complete with Tripod, Target and Plumb Bob	$30.00

One in a Wood Box; Weight Complete 15 Lbs. Each

ARCHITECTS' TRANSIT LEVELS

Sold for Direct Shipment Only from Toledo, Ohio

For Architects, Contractors, Builders, etc., for leveling Walls, Foundations, Timbers, etc., laying out Angles, giving Lines and Levels for Buildings, Setting Machinery, Grading Streets, Sewers, Drains, etc.

Telescope or Sight Tube 12 in. Long, Magnifying Power 10 Diameters Objective 1½ in. with Rack and Pinion Movement Dust Guard, Sun Shade and Dust Cap The Eye Piece is adjustable for the sighting cross hairs Graduated Level Vial, 4½ in. Horizontal Circle, divided into degrees, reading by vernier (attached to Saddle) to five minutes this horizontal Circle is reversible to same at zero at any given point; Has 4 Leveling Screws; Hardwood Tripod.

	Each
No. 13—Complete with Plumb Bob, Adjusting Pins and Metal Trivet for Foundation Work	$67 50
No. 13C—Convertible; Same as No. 13, but is arranged for taking Vertical Sights to 45 degrees in either direction and Horizontal Angles between two Points not in the same Plane; Adjustable Horizontal Bearings makes Instrument Rigid and Accurate and prevents over balancing Telescope	$87 00

One in a Mahogany Finished Case; Weight 25 Lbs. Each

ZENITH ADJUSTABLE PLUMBS AND LEVELS

Made of Best Selected Wood chosen for its lightness; Natural Ma[illegible], The Five Piece Stocks or those made in Five Pieces are [illegible] against warping or twisting.

The [illegible] feature of Zenith Plumbs and Levels is the Adjustment [illegible] Glass. [illegible] Metal Tube.

[illegible] Zenith Level the Tube is [illegible] to a Brass Wood, to Which [illegible] fast [illegible] by [illegible] Brass Machine Screws

ZENITH, LEVEL, PLAIN ENDS

	Per Dozen
No. Z7—3x1 in. Stock; Assorted Lengths, 14, 16, 18 and 20 in.	$7 25

Average Weight [illegible] Lbs. per Dozen

Non opposite sides, so that any Glass may be turned and used as a Level for Horizontals, or a Plumb for Verticals, or an Inclinometer for Angles, Rafter Pitches, etc., etc. Each Glass is deeply marked for centering the Bubble, the openings are large and reading is easy from either side.

There is no Glass on the top face.

The Sides are deeply grooved for Finger Holds.

ZENITH, PLUMB AND LEVEL

Plain Ends	Per Dozen
No. Z6—3½x1⅜ in. Stock, Assorted Lengths 22, 24, 26 and 28 in.	$12 00
Brass Ends	Per Dozen
No. Z5—3½x1⅜ in. Stock, Assorted Lengths 22, 24, 26 and 28 in.	$14 50

Average Weight 30 Lbs. per Dozen

ZENITH, PLUMB AND LEVEL, BRASS ENDS

One Piece Stock	Per Dozen
No. Z4—3½x1⅜ in. Stock, Assorted Lengths 24, 26, 28 and 30 in.	$24 00
Five Piece Stock	
No. Z3—3½x1⅜ in. Stock, Assorted Lengths 24, 26, 28 and 30 in.	30 00

Average Weight 36 Lbs. per Dozen

ZENITH PLUMB, LEVEL AND PITCH

One Plumb, One Level and One Graduated Inclinometer (shown at Bottom of Page) or Pitch and Rafter Gauge Vials, Brass Ends.

One Piece Stock	Per Dozen
No. Z2—3½x1⅜ in. Stock, Assorted Lengths 26, 28 and 30 in.	$32.50
Five Piece Stock	
No. Z1—3½x1⅜ in. Stock, Assorted Lengths 26, 28 and 30 in.	39 50

Average Weight 36 Lbs. per Dozen

ZENITH MASONS' PLUMB AND LEVEL

Plumb, Level, Plumb Bob and Graduated Inclinometer Plumb or Pitch Glass

	Per Dozen
No. Z8—3½x1⅜ in. Stock, Length 48 in., Three Vial, Five Piece Stock, Fitted with Brass Plumb Bob and Braided Black Silk Line, Level and Plumb in the Stock at Each End and the Bubbles Strongly Protected by Heavy Transparent Celluloid Plates	$37.50
Weight 42 Lbs. per Dozen	
No. Z9—Without Plumb Bob (otherwise same as above), 3½x1⅜ in. Stock, Length 48 in.	36 00
Weight 40 Lbs. per Dozen	

HANDY PLUMBS AND LEVELS

Length 12 in.; Cherry Varnished

LEVEL AND PLUMB	Per Dozen
No. 33—1⅜x⅞ in. Stock	$3 50

LEVEL ONLY, WITHOUT PLUMB	Per Dozen
No. 23—1⅜x⅞ in. Stock	$2.00

Average Weight 9 Lbs. per Dozen

ZENITH LEVEL GLASSES WITH GRADUATED DIAL

This simple device is very useful to any Carpenter, Brick Layer, Engineer, Track Layer, or in fact anybody who does any work which needs truing up.

It can be attached to any level or straight edge to be used for Plumb, Level, Inclinometer or Pitch and Rafter Gauge.

To attach this to the Level or Straight Edge, first bore a 1⅜ in. hole, then attach the Steel Casing of Dial, by small screws or brads. Set the Level or Straight Edge on a level surface, then place Glass and Brass Dial in position

so that the Bulb is centered and mark the rim of casing at zero. At both top and bottom, attach the screws and washers holding dial to place, and it is ready for business.

Any degree desired from 1 to 90 can be obtained by simply turning the Brass Dial so that the degree desired is at the mark in Casing. Then raise or lower the end of the Level until the Bulb centers. The same holds good with Rafter and Pitch Gauge, as you will note the markings are from 1 to 12 both ways up and down, consequently, you can run the pitch from 1 foot rise for 12 foot rafter to any desired pitch.

	Per Dozen
No. 450—Diameter 3 inches, Brass Graduated Dial, Figures and Marks Deep and plainly cut, Level Glass is Cement Set in Nickel Plated Steel Tube; the Brass Dial is set in an Oxidized Steel Casing	$9 00

One in a Box; Weight 3 Lbs. per Dozen

BETTER AUTOMOBILE PARTS

LET US { **Relieve your manufacturing details,**
Furnish you with a better product.

Bearing Troubles Eliminated for the Manufacturer

Our improved system of die casting, and the use of only the highest grades of bearing metals, enable us to offer you a die cast bearing bushing proposition of Superior merit Furnished to your specifications in Genuine Parsons' White Brass, or any of the high grade Motor Babbitts.

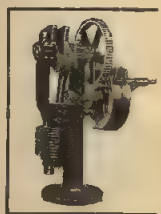
Labor Lightened for the Garage.

Designed especially for garage use, our line of Belt and Motor Drive Air Compressors, for tire inflating and cleaning purposes, lighten labor in the garage, and save you money.

Single and three cylinder types.

Stationary and Portable Outfits

A post card brings a circular



Will You Send us Your Blue Prints for Estimate?

Specialized Production of

Pistons **Piston Pins**
Piston Rings **Motor Timing Gears**
Clutch Plates
Hardened and Ground Parts
Transmission Gears

We furnish to your specifications where required, or can supply you with standard parts.

THE F. W. SPACKE MACHINE CO.

INDIANAPOLIS, IND., U. S. A.

Car Owners—Car Dealers—Car Makers all want the Grade Indicator

and they want it in combination with the

Splendid New Stewart Speedometer—Model B

Temperature Compensated

To insure the utmost possible accuracy in an instrument of this kind, a compensator is provided that, acting on the spring, takes care of any error that might arise because of changes in the atmospheric temperature.

Model B, $50
Model B-1, $85
(Clock Combination)

The perfected product of the world's greatest speedometer factories.

The technical press, engineers, trade and user, all agree that the *Grade Indicator* is the most important and most needed feature that has been combined with a speedometer; just as essential as the odometer.

The Grade Indicator teaches a driver just what to expect and what not to expect from his car.

It tells him when to shift gears in climbing hills or steep grades.

It tells him what to reasonably expect in the way of power and speed when ascending grades.

It tells him the proper spark position.

It tells him when he is straining and misusing his motor.

It tells him when he is really on a grade and prevents him blaming the car for want of power and speed.

It saves many an unjustified complaint and the need of many an ignition or carburetor adjustment.

Car makers agree that the grade indicator is very necessary for the intelligent operation of an automobile. For years many of them have—in their instruction books—recommended the purchase and use of such a device. They realize that it will insure the car owner better service from his car, more satisfaction and pleasure.

Many of them have now contracted to use Model B on their entire output for 1913. Dealers tell us that our big advertising campaign—pointing out the advantages of a grade indicator—will make it easy to sell cars equipped with the **New Stewart Combination Speedometer and Grade Indicator,** against competitive cars equipped with an ordinary speedometer.

It has been prophesied for this new instrument the greatest *vogue* ever attained by any speedometer. We are already convinced that in the very near future a speedometer without a grade indicator will be considered obsolete.

You can get one of these instruments with your 1913 car if you insist. Accept no other.

Nothing has been omitted, no expense has been spared that would enhance the value, utility, finish or appearance of this truly beautiful instrument.

Stewart & Clark Manufacturing Company

1923 Diversey Boulevard, Chicago

BRANCHES—Detroit, Chicago, San Francisco, New York, Boston, Cleveland, Philadelphia, Kansas City, Los Angeles Minneapolis, Indianapolis, London, Paris.

PALMER-SINGER

BRIGHTON "6"

1913 1913

A LOW, RAKISH, GRACEFUL CAR—$2000

A CAR FOR THOSE WHO DISCRIMINATE

The Palmer-Singer Brighton "6" is the strongest built car in the world, and will withstand the severest strain that a motor car can be called upon to endure.

We built the best car that could be built and priced it afterwards.

Every detail of construction is as perfect as the highest grade of materials and expert workmanship can make them.

DISTINCTIVE IN LOOKS DISTINCTIVE IN QUALITY

45 H. P., 6 cylinders, T head motor, full floating type rear axle, multiple disc clutch running in oil, imported magneto, double ignition, 127" wheel base, deep upholstery. The above is only a brief description of its many points of merit.

Send for further particulars and specifications of the 1913 Brighton Six.

LIVE DEALERS, HERE IS YOUR OPPORTUNITY

We want to get in touch with live wire, hustling dealers, as we are now prepared to make contracts for deliveries on our 1913 models. Act Now before your territory is snapped up. Write or wire at once for our proposition.

PALMER AND SINGER MFG. CO.

New York Branch
1620-22-24 Broadway

FACTORY
LONG ISLAND CITY

Chicago Branch
2638-40 Michigan Ave.

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1913 1913

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The Palmer-Singer Brighton "6" is the strongest built car in the world, and will withstand the severest strain that a motor car can be called upon to endure.

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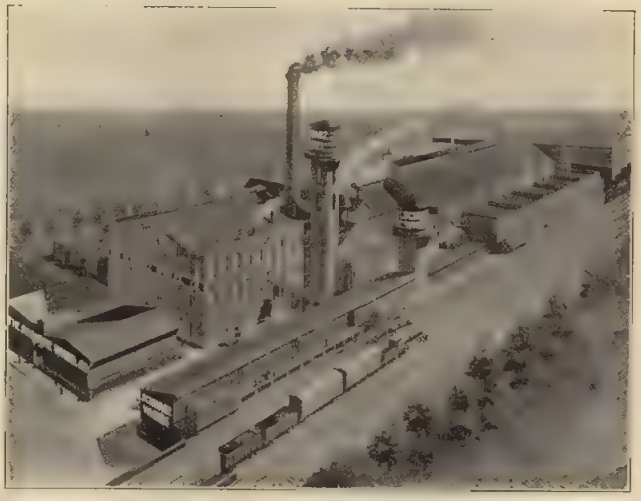
PALMER AND SINGER MFG. CO.

New York Branch
1620-22-24 Broadway

FACTORY
LONG ISLAND CITY

Chicago Branch
2638-40 Michigan Ave.

Like the "Men Behind the Guns" the "Factory Behind the Product" Has Much to do With Success



When you are contemplating the purchase of automobile wheels, the most important items for your consideration are:

1—Popularity of product with the buying public
2—Quality
3—Form of construction
4—The manufacturer's reputation
5—Manufacturing facilities

The undisputed leadership of ***SCHWARZ WHEELS*** is known to the automobile maker, dealer and buyer. The name "SCHWARZ" is synonymous with superiority.

The facilities for making these wheels, however, are not known to everyone. For that reason we are illustrating our announcement this month with a view of our modern factory, which was designed, built and equipped solely for the purpose of making the best automobile wheels in the world.

Let us design and proportion wheels for you.

Send for descriptive booklet

THE SCHWARZ WHEEL COMPANY, FRANKFORD PHILADELPHIA

RAZORS

No. 1001. ⅝ in. Cut ... per dozen, $24 00
No. 1002. ⅝ in. Cut ... per dozen, 24 00

RAZOR ASSORTMENT

No. 10. Assorted, ⅝ in square ... per case, $26.00

RAZORS

ASSORTMENT IN DISPLAY CASE

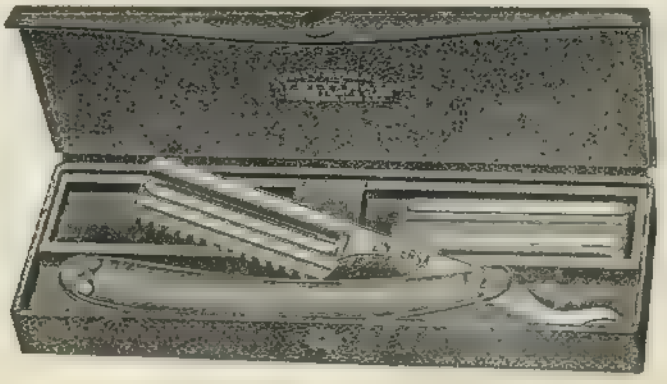
TREE BRAND

No. 1081. Three Brand Razor assortment.....per case $24 00

Comprising this assortment are razors with fancy handles and the best possible selection of blades. The front sides of all blades are ground and polished. The display cases are handsomely made in imitation alligator with hinged glass top

SAFETY RAZORS

UNIVERSAL



Razor, guard and extra blade in plush lined Russian leatherette case

No. 30. Ivory, black handle ..... each $2 50
No. 60. Ivory, antique handle ..... each 2 50

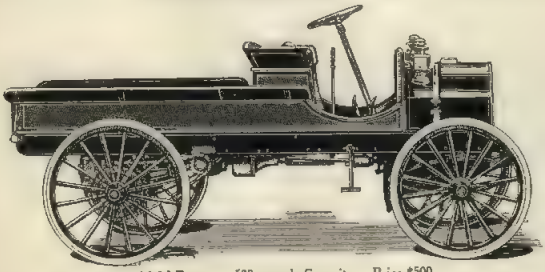
The Universal safety razor shaves with the diagonal motion, the only correct principle. The edge of every blade is examined under a powerful microscope to make sure it is a perfect cutting instrument. He who shaves downward on each side of the face must change the guard from one side of the blade to the other side while shaving while he who shaves down on one side and up on the other need not change the guard

A Brand New Chase Truck

Chase Model M

Price, $500.00—500 lbs. Capacity

Will Sell Like Hot Cakes



Model M Express—500 pounds Capacity. Price $500

The Little Fellow with the Big Pull

To meet the rapidly growing demand for a motor truck of **500 pounds** capacity at a price of **$500.00,** we present Model M. Confident that it will satisfy the immediate needs of a great host of business houses everywhere, we offer it to an expectant market.

Model M embodies all the great **Chase** features of efficiency, simplicity and economy, which have made the name **Chase** stand for the best in the field of motor delivery service. We have utilized all our thought and experience in designing and building this car and we are offering it at a hitherto unheard-of price.

Our foremost aim is to please business men whose activities or desires do not warrant the expense of a heavier truck—those many thousands of prospective truck users who have been patiently waiting the day when they could buy a truck at a price within their reach—one built by a company with known reputation for quality —and one which would do their delivery work more efficiently, more economically, and more promptly than is possible with horses.

Price: Express, $500.00; Panel Top, $600.00.

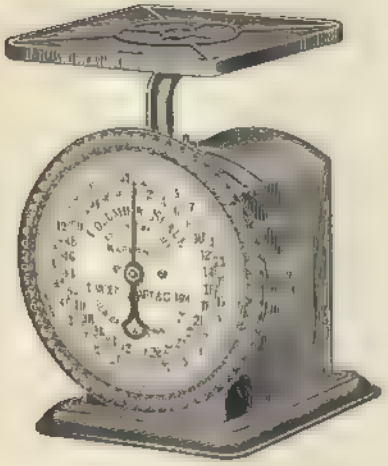
Write at once for details of this wonderful little truck, also particulars concerning open territory.

CHASE MOTOR TRUCK COMPANY

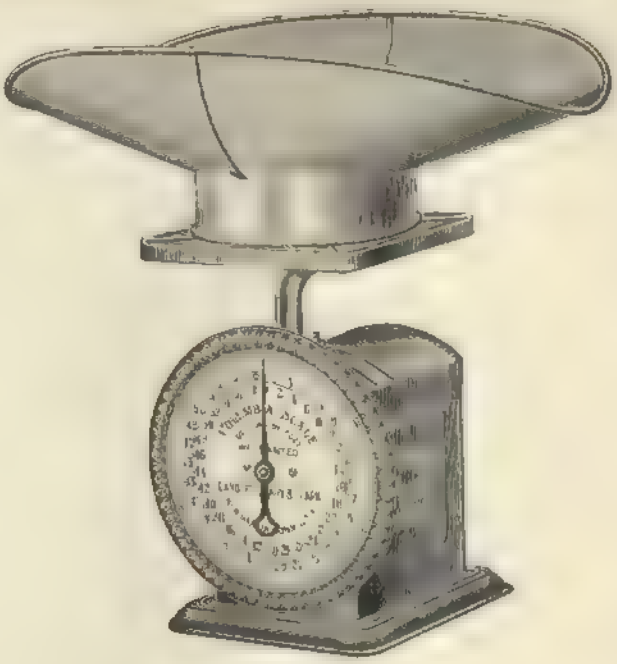
334 S. WEST STREET SYRACUSE, N. Y.

SCALES

COLUMBIA FAMILY



No. 162.



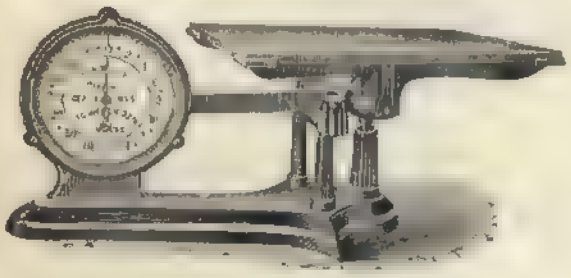
No. 1162

Made of sheet steel throughout, finished in black enamel decorated in gilt, white enamel dial, square steel top. Regulated by brass screw on top. Cap over set screw.

No. 162. Weighs 60 pounds by two ounces..... per dozen, $30 00
No. 1162. Weighs 60 pounds by two ounces, with tin scoop..... per dozen 37 50

One in a box

TURNBULL'S MARKET SCALES



With Marble Platform

Double Dials

Seven inch dials, glass sash, steel bearings throughout, finished in black with gold stripes.

No. 33. Weighs 32 lbs. by 1 oz., each.. $16.00
No. 43. Weighs 64 lbs. by 2 oz., each.. . . . 18 00

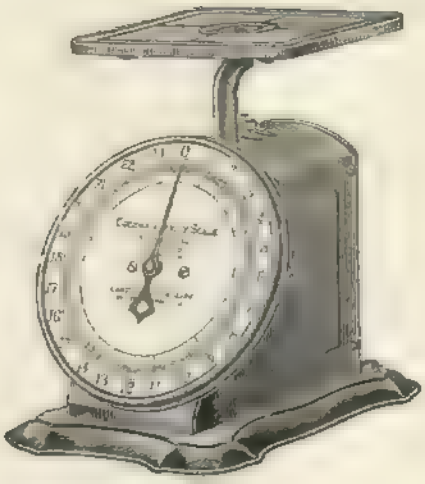
One in a box

GERMAN ICE SCALES

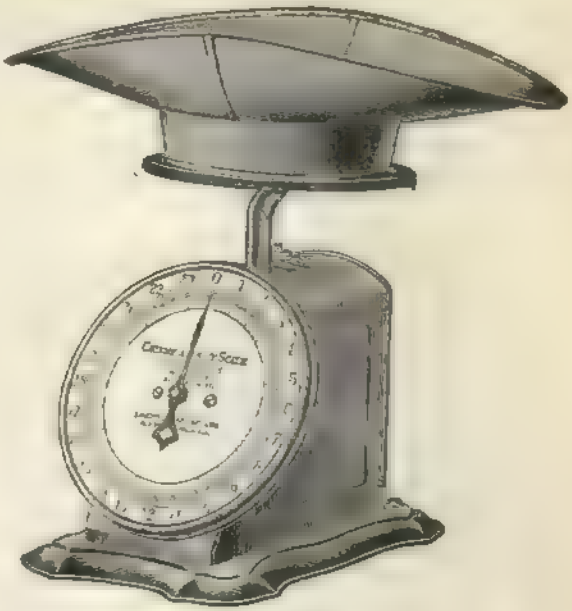
400 Pounds, extra quality, double hook, per dozen . $4 10

FAMILY SCALES

COLUMBIA



No. 502



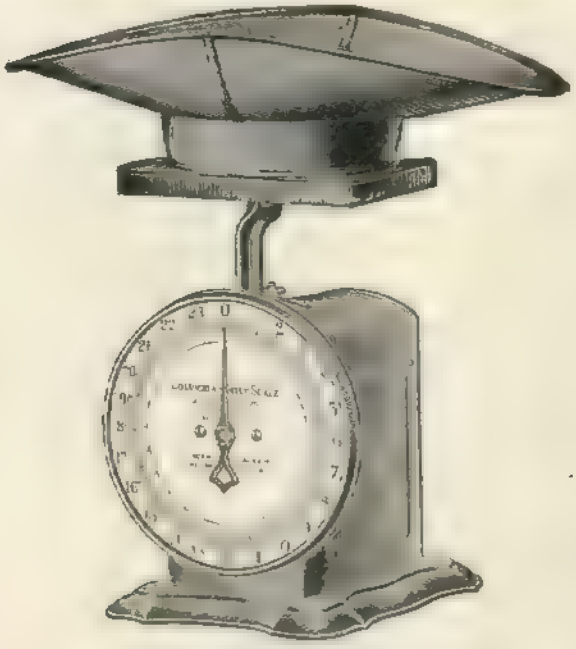
No. 1502

Slanting Dial

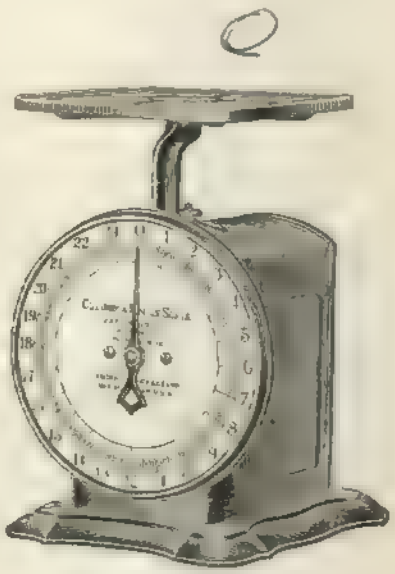
Made of sheet steel throughout, japanned in black enamel, decorated in gilt, white enameled dial, square steel top. Regulated by brass screw on top. Cap over set screw

No. 502. Weighs 24 pounds by ounces ..... per dozen, $14.40
No. 1502. Weighs 24 pounds by ounces with tin scoop ..... per dozen, 16.80

One in a box



No. 1102



No. 102

Made of sheet steel throughout, japanned in black enamel, decorated in gilt, white enameled dial, square steel top. Regulated by brass screw on top. Cap over set screw

No. 102. Weighs 24 pounds by ounces ..... per dozen, $15 60
No. 1102. Weighs 24 pounds by ounces with tin scoop ..... per dozen, 19.20

One in a box

COLUMBIA ZITHERS

No. 92.

No. 92½.

No. 91 Ebony finish, gilt striping around sound-hole and edges, 31 strings, 4 chords, in key of C.....Each $5 25

No. 92 Ebony finish, gilt striping around sound-hole and edges, arm rest over hitch pins, 31 strings, 4 chords, in key of C. Each 6 00

No. 92½ Ebony finish, gilt striping around sound-hole and edges, arm rest over hitch pins, 31 strings, 4 chords, keys of C and F .....Each 7 50

Each instrument in a pasteboard box with Instruction Book, Tuning Key, Music Rack and Ring. Special list of music furnished on application.

COLUMBIA ZITHER CASES.

No. 941 Columbia Zither Cases, superior model and quality, flannel lined, for No. 91.....Each $3.00

No. 942 Columbia Zither Cases, superior model and quality, flannel lined, for No. 92 .....Each 3.00

No. 943 Columbia Zither Cases, superior model and quality, flannel lined, for No. 92½.....Each 3.00

GUITAR ZITHERS

No. 90 Maple, cherry stained, polished, 27 strings, 3 chords, C, F and G major, Each $3 50

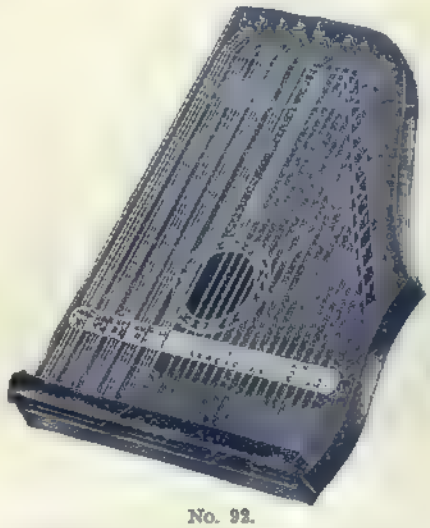
No. 90½ Maple, cherry stained, polished, with hand rest, 31 strings, chords C, G and F major and G seventh..Each 5.75

No. 92 Ebonized maple, highly polished, ornamentation around sound-hole, hand rest, 31 strings, 4 chords C, G, F major and G seventh...Each 6 75

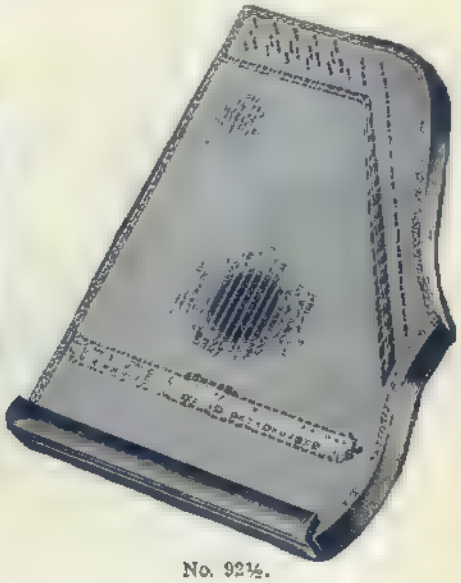
No. 92½ Ebonized maple, highly polished, ornamentation around sound-hole and edges, hand rest, 41 strings, 5 chords, A, D, F, G and C major Each 9 50

No. 93½ Ebonized maple, highly polished, handsomely ornamented around sound-hole and edges, nickel plated tuning pins, 51 strings, chromatic scale, 8 chords, C, G, F, D, A, E major and A, D minor.....Each 12 75

Each instrument in pasteboard box, with Instruction Book, Tuning Key, Music Rack and Ring. Tuning Scale on each instrument. Lists of Music for Guitar Zither furnished upon application.



No. 92.



No. 92½.

GUITAR ZITHER CASES

No. 932 Guitar Zither Cases, canvas, superior model and quality, flannel lined, for No. 92½ .....Each $3.00
No. 936 Guitar Zither Cases, canvas, superior model and quality, flannel lined, for Nos. 90 and 90½ .....Each 3.00
No. 938 Guitar Zither Cases, canvas, superior model and quality, flannel lined, for No. 92 .....Each 3.00
No. 940 Guitar Zither Cases, canvas, superior model and quality, flannel lined, for No. 93½ .....Each 3.00

Zither Furnishings can be obtained at lowest prices.

ZITHERS

PRIM SIZE.

With Patent Heads.

No. 912 Imitation rosewood, inlaid sound-hole and edges, in pasteboard case ..... Each $15 75

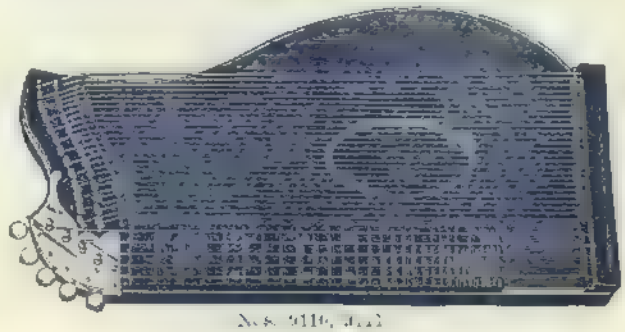
CONCERT SIZE.

With Patent Heads.

No. 970 Imitation rosewood, inlaid sound-hole, in pasteboard case .....Each 19 25

Our Rock-bottom Quotations include boxing. Safe delivery insured. All orders filled promptly. No delay.

THE "ARION" ZITHER



No. 9110, 9111.

PRIM SIZE.

No 9110 Beautiful imitation rosewood top, inlaid sound hole edges bound with celluloid, highly polished, our own make, machine head in pasteboard box.....Each $32.50

CONCERT SIZE.

No 9111 Same description as No. 9110, concert size....Each 34.25

VIOLIN, MANDOLIN AND GUITAR OUTFITS

Especially Selected and Arranged for Beginners or Amateurs

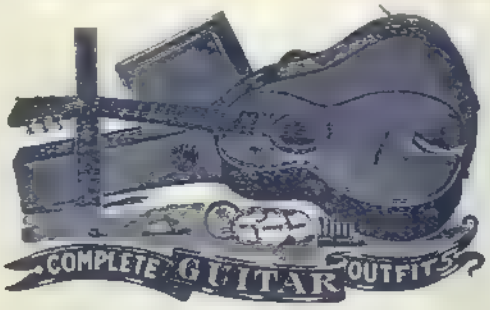
No. 9113 Outfit contains one of our No. 9114 Violins, edge for shaded wood model and finish in maple imitation snake-wood, violin low ebony frog, inlaid dot, inner slide and button, wood case, black varnished, half lined with flannel, set of violin strings, one piece of rosin and **Self National Instruction Book**.....Each $9.00

No. 9112 Outfit contains one of our No. 9421 Violins, light brown color, polished and shaded, well finished and exceptionally very durable maple violin, low ebony frog, inlaid pearl slide, German silver and ebony button, wood case, black varnished half lined with flannel, one set of superfine quality violin strings, one piece of rosin and **Self National Instruction Book**.....Each 13.00

No. 9113 Outfit contains one of our No. 9175 Vuillaume model Violins, best amber color, shaded, highly polished, fine figured, ebony fingerboard, etc., Brazil wood violin low, leather grip ebony frog, pearl slide, pearl eye, German silver lined and German silver button, fine wood case, black varnished, half lined with flannel, one set of superfine quality violin strings, one piece of rosin and **Self National Instruction Book**.....Each 16.50

No. 9114 Outfit contains one of our No. 9396 Stainer model, dark brown color, highly polished, full ebony trimmed fine Brazil wood, octagon shape, ebony frog, pearl inlaid eye, pearl slide, German silver inlaid, German silver button, fine wood case, black varnished, full lined with flannel, one set of superfine quality violin strings, one piece of rosin and **Self National Instruction Book**. Each.....19.25

No. 9115 Outfit contains one of our No. 9174 Salzard model Violins, dark red color, highly polished, fine Brazil wood, ebony frog, pearl inlaid eye, pearl slide, full German silver lined, German silver button, leather grip, finest wood case, highly black varnished and polished, exposition shape and full flannel lined, finest set of violin strings, one piece of rosin and **Self National Instruction Book**.....Each 2.75



No. 9100 This Outfit contains one of our ever popular No. 91250 Guitars, which is made of solid birch, back and sides, concert model, fine mahogany neck, solid, walnut finger-board with pearl position dots, inlaid sound hole, nickel patent tailpiece and strung with best steel strings, also one nickel plated, side canvas case and a handsomely nickel plated Capo d'Astro, as shown in the illustration, a guitar thumb pick, one of our guitar finger-board charts, by the use of which a player can easily master all notes and positions on the finger-board; 1 Self National Instruction Book, which not only contains the elementary instructions for playing the guitar, but also contains a number of easy and popular selections. A set of best grade steel strings, one of our guitar tuning pegs with pearl E, B, G, D, A, and E, which makes guitar tuning merely a matter of a few seconds with the youngest player.....$11.50

No. 9101 In this outfit we include our popular "Jupiter" Guitar No. 9241, finished in dark mahogany, hand polished, with spruce top, fancy colored wood inlaying around sound-hole, edges inlaid with fancy colored wood and bound with celluloid; handsome mahogany finished neck, finger-board inlaid with pearl position dots fitted with our own patent heads and tailpiece, strung with the best grade steel strings. The case and all other sundries included with this outfit are the same as described in Outfit No. 9100..... 16.00

No. 9102 Outfit No. 9102 contains our handsome standard size "Lakeside" Guitar No. 9620 which has a beautifully figured birch back and sides finished in a dark mahogany, carefully hand polished with spruce top, fancy colored wood inlaying around sound hole. Corded inlaying around edges, and both top and back edges bound with celluloid, fancy inlaid stripe down the center of the back, the neck is finished in fine mahogany with pearl veneered head-piece, solid rosewood finger board, pearl position dots fitted with our own nickel plated patent head and tailpiece, strung with best grade steel strings. The case and all other sundries included in this outfit are the same as described in Outfit No. 9100..... 19.75

No. 9200 This outfit contains one of our popular No. 91208 Mandolins, solid maple and walnut, attractively inlaid sound hole, tortoise celluloid guard plate, walnut finger-board with position dots and nickel covered tailpiece, one of our high grade canvas cases, a Self National Instruction Book, which contains elementary instruction for playing the mandolin, and also a number of easy and popular selections; a complete set of the best grade mandolin strings, a finger-board chart, by the use of which every note on the finger-board is clearly marked, and enables the beginner to acquire accurate fingering with much less study than heretofore. Also one of our mandolin tuning pegs with four pairs to nickel E, A, D, G, and by its use a mandolin can be tuned quickly and accurately..... $ 8.50

No. 9201 This outfit contains one of our Jupiter Mandolins, No. 9241, which has a rich dark mahogany finish with black inlaying between, broad colored wood inlaying around sound-hole, and edges very neatly celluloid bound, finished throughout with a high varnish finish; spruce top, mahogany finished neck, solid rosewood finger-board, tortoise celluloid guard plate, pearl position dots, fitted with our own nickel plated patent head and nickel shell pattern tailpiece. All the accessories described in Outfit No. 9200 are contained in this outfit..... 11.75

No. 9202 We include with Outfit No. 9202 one of our high grade Lakeside No. 9621 Mandolins which has 9 ribs of rosewood and maple, neatly inlaid with ivory inlaying between each rib extended rosewood apron, handsomely polished broad colored wood inlaying around sound hole, edge inlaid with corded inlaying and cord bound, spruce top, mahogany finished neck, veneered headpiece rosewood finger-board and tortoise shell guard plate, pearl position dots, fitted with our own patent head and nickel shell pattern tailpiece. All the accessories described in Outfit No. 9200 are contained in this outfit..... 14.25

CONCRETE MACHINERY

For Direct Shipment from Near-by Wisconsin Factory

BRICK MACHINES

TEN-BRICK MACHINE

Makes the brick face up or face down and either plain or ornamental as desired. It is speedy, easily operated and strongly built. Any ordinary farmer, mason, carpenter or builder can operate it with excellent results and to good advantage. Made of the very best grade of gray iron. Outfit consists of machine proper together with [illegible] and striker. With the Ten-Brick Machine is furnished an Ornamental Face Plate Attachment which allows the ornamental brick to be made face down and removed face up. This attachment consists of special colter, swinging arms and a special polished [illegible]. Will make standard size brick 2¼x4x8¼ in. All brick will be perfectly uniform in size, perfect in shape and with sharp edges and corners.

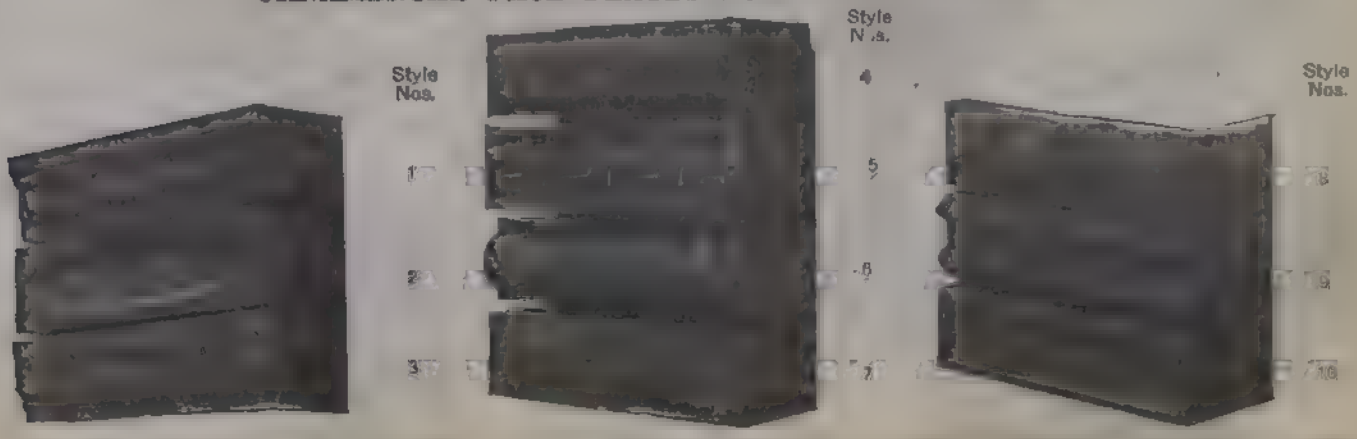
	Each
No. 251—Ten-Brick Machine Complete.	$79 20
Weight 425 Lbs. Each	
No. 252—Ornamental Face Plates for making any of the ornamental brick shown below.	.60
Weight 3 Lbs. Each	
No. 253—Ornamental End Plates, for making any of the ornamental brick shown below with ornamental end	.48
Weight 1½ Lbs. Each	

SIX-BRICK MACHINE

This machine is a useful one for odd [illegible] farmers, individual builders, etc. It is much lighter than the ten-brick machine and can be easily loaded into a wagon. Makes six perfect brick at each operation and is quickly and easily operated. Construction same as ten-brick machine, except that the [illegible] is made to suit [illegible] with the Ornamental Face Plate Attachment. In making ornamental brick with this machine a sufficient quantity of face plates would have to be purchased for the number of brick to [illegible] at one time, as the brick would stick to the plates unless removed. Makes standard size brick 2¼x4x8¼ in.

	Each
No. 261—Six-Brick Machine Complete	$51 80
Weight 170 Lbs. Each	
No. 262—Ornamental Face Plates for making any of the ornamental brick shown below.	.60
Weight 3 Lbs. Each	
No. 263—Ornamental End Plates for making any of the ornamental bricks shown below with ornamental end	.48
Weight 1½ Lbs. Each	

ORNAMENTAL FACE PLATES FOR ABOVE MACHINES

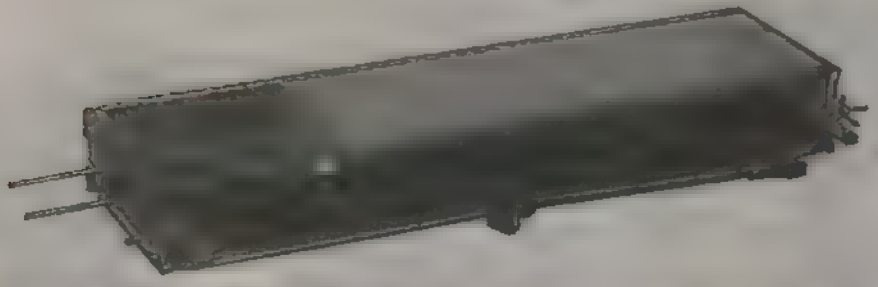


In making brick with Ornamental Face and End one style of plates are required and when making Ornamental Face and Plain End another style of face plate is required. In ordering these goods, be specific and state whether you wish to make brick with [illegible] Ornamental Face and Ornamental Face and Plain End or, if you wish to make both, order the Face Plates and One End Plate, which constitutes a complete set, also be sure to specify style number shown opposite above cuts as well as the number of the plate.

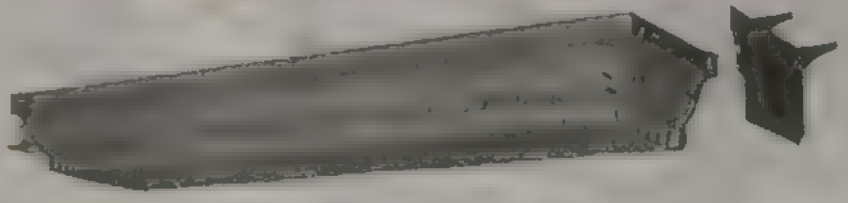
CONCRETE MACHINERY

For Direct Shipment from Near-by Wisconsin Factory

ADJUSTABLE CAP AND SILL MOULDS



[illegible] Mould for making Sills, Lintels, Water Table Blocks, Coping, Cornices, Door Caps, Stairs, Posts, Blocks, Chimney Blocks, Horse Blocks, etc. Made of heavy [illegible] ly reinforced at the edges to prevent springing. Can be adjusted in length from 2 to 5 feet, and in width from 10 to 14 inches. Can [illegible] r this machine Plain, Rock, Panel, Tooled Margin Rock, Tooled Margin Bush-hammer, Horizontal Tooled or Ver[illegible] l [illegible]. [illegible] e al[illegible] so that one can be taken off and another substituted in a [illegible] s [illegible].

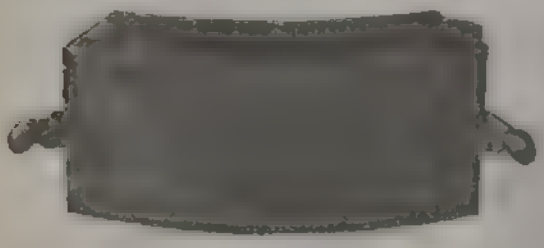


EGG AND DART COPING ATTACHMENT FOR ABOVE SILL MOULD

Th[illegible] Car[illegible] easily [illegible] Sill Mould. [illegible] we can furnish complete Egg and Dart Coping Mould as listed below.

	Weight Lbs., Each	Each
No. 291—Adjustable Cap and Sill Mould	170	$18 00
No. 292—Extra Face Plates	55	7.20
No. 293—Egg and Dart Coping Attachment (including Face, Two Ends and Stop-off Pla[illegible]	170	19 20
No. 294—Egg and Dart Coping Mould, complete	225	26.40

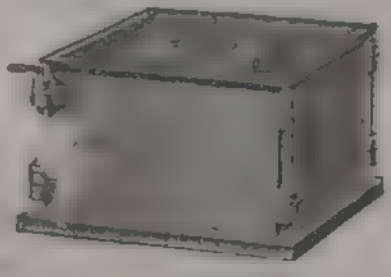
WELL CURBING AND TANK MOULDS



This Mould is particularly adapted for making well curbing, water tanks, supply tanks, cisterns, etc. They are also extensively used for making small culverts and give good satisfaction for this purpose. Made of heavy gray iron castings, consisting of front and back plate, circle end and key end. The two ends are hinged to the back plate and fastened to the front plate with two hand latches.

Nos.	Size of Circle Feet	Height Inches	Weight Lbs. Each	Each
371	3	7¾	50	$6.00
372	4	7¾	56	6.36
373	6	7¾	62	6.84
374	8	7¾	75	7.43
375	10	7¾	82	8.40
376	12	7¾	90	9.60

PIER AND CHIMNEY MOULDS



For making Pier Blocks, Chimney Blocks and Porch Column Blocks. Combined with a ball mould it makes very nice ornamental gate posts or entrance posts on porches. Can furnish moulds 8x8, 10x10 and 12x12 in. square in Rock, Plain and Panel Designs; 14x14 and 16x16 in. square in Imitation Brick, Rock, Panel Tooled, Tooled Margin Bushhammer, Plain or Cobblestone design and Tooled Margin Rock. 16x24 and 20x24 in. in Rock and Brick Faces.

Nos.	Size In.	Height In.	Size of Core In.	Weight Lbs.	Each
3710	8x 8	7¾	4x4	35	$6.00
3711	10x10	7¾	5x5	44	6.60
3712	12x12	7¾	6x6	55	7.20
3713	14x14	7¾	7x7	60	7.50
3714	16x16	7¾	8x8	70	8.64
3715	16x24	7¾	8x16	90	9.60
3716	20x24	7½	12x16	110	12.00

We ship Rock Face unless otherwise specified.

CORNICE BRAKES

Double Truss

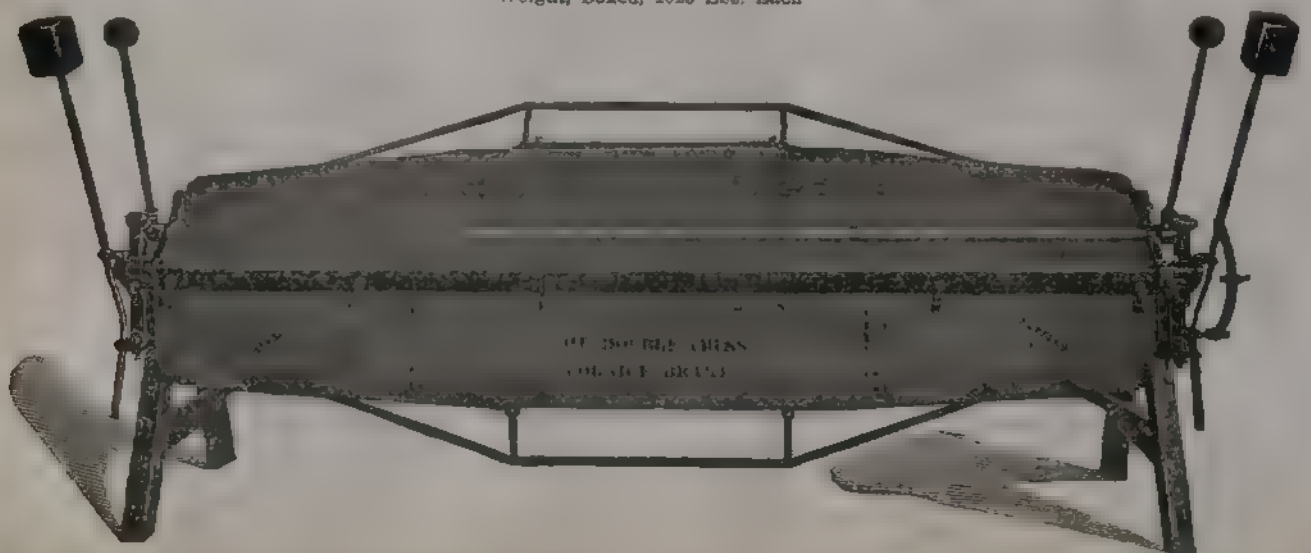
Very Strong, Durable and Easy-Acting. Built of Hard Wood reinforced by Double Truss, making them absolutely rigid at all points; All wearing parts are heavily protected, Heavy Malleable Castings; Much lighter than all-metal machines; No Springs or Complicated Parts to get out of order. Will form any combination of angles and curves; very fast and easily operated

No. 4—Bending Edge, 4 ft. 1 in. Long, ⅛ in. Wide; Will form No. 22 Gauge or Lighter Full Length; Six Half Round Formers, ⅞ to 2½ in. Diameter.....$50.00

Weight, Boxed, 375 Lbs. Each

No. 8—Bending Edges, 8 ft. 1 in. Long, ¼ in. Wide. Will Form No. 22 Gauge or Lighter Full Length. Six Half Round Formers, ⅞ to 2½ in. Diameter $116.00

Weight, Boxed, 1025 Lbs. Each



Each

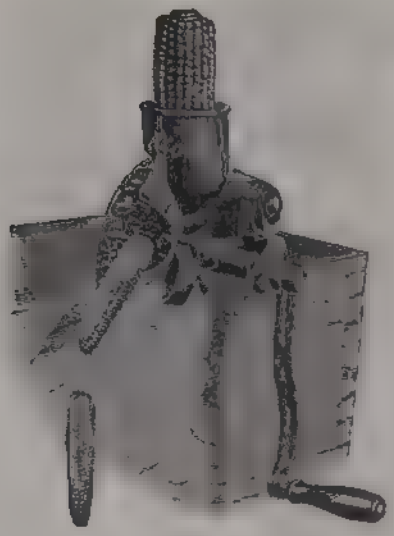
No. 10—Bending Edge, 10 ft. 1 in. Long, ⅜ in. Wide; Stiffening Bar for Heavy Work. Will Form No. 22 Gauge or Lighter Full Length Six Half Round Formers, ⅞ to 2½ in. Diameter... ..... $145.00

Weight, Boxed, 1400 Lbs. Each

Above Cornice Brakes not Carried in Stock; Shipped Direct from Factory

CORN SHELLERS AND GRINDING MILLS

CORN SHELLERS

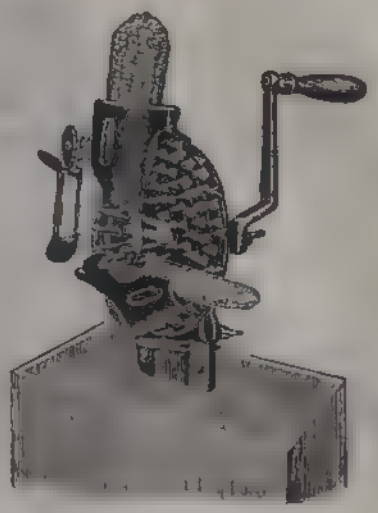


RED CHIEF

A High Grade Sheller built for Service and Results. It has Patent Teeth which do not injure the Corn but push the Grain off and leave the Cob Ears and the Kernels whole. Very Light and Easy Running and Substantially built throughout.

	Each
No 2—Red Chief Corn Sheller	$2 30

Weight 12 Lbs. Each



STAR

A medium priced, simple and durable Sheller for small users. The handle is placed in the center of the disc making a steady motion of the disc, and doing away with all danger of side motion. This Sheller is equipped with clamps for fastening, thus enabling the user to readily move Sheller from place to place if desired.

	Per Dozen
No. 1—Cast Iron Japanned	$16 00

Weight 150 Lbs. per Dozen

CORN SHELLERS

SQUARE FRAME, ONE HOLE CORN SHELLER

A most durable priced Sheller, durable and well constructed. The frame work is hardwood, strongly joined together with mortise and tenon joints, all [illegible] properly proportioned. The Gearing is placed outside the Frame so that it cannot become clogged, but is protected by a Hood or Cover so that all danger is avoided. This Sheller can be adjusted so as to shell any kind of corn and shell it clean.

	Each
No. 3—Complete with Fan and Feed Table	[illegible]

Weight 120 Lbs. Each

GRINDING MILLS

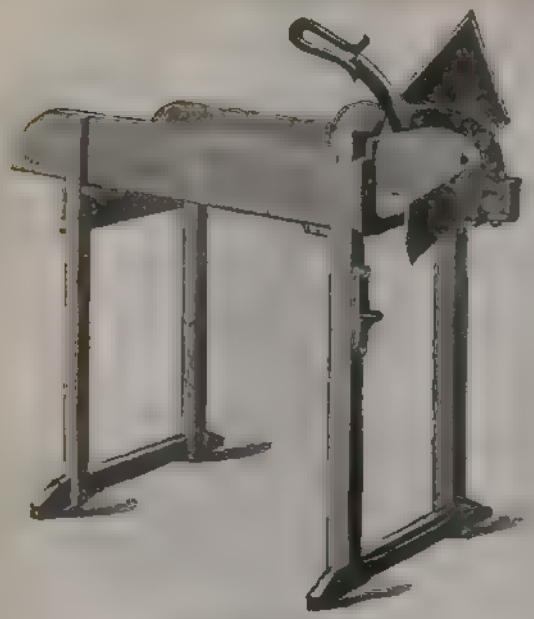
RED CHIEF GRINDING MILL

An Ideal Mill for Cracking Grain or Corn of any kind for Poultry and Stock; will also Grind the finest Meal and Graham Flour. Fine for Grinding Coffee and Spices.

	Each
No 4—Red Chief Grinding Mill	$4 30

Weight 15 Lbs. Each

HAND AND POWER FEED CUTTERS



LEVER FEED CUTTER

Box is [illegible] from Thoroughly Seasoned Hardwood; well put together and nicely finished. Has Curved Knife with Device for Holding and Adjusting which always gives a Clear Cut. Also has Gauge Plate to govern length of Cut. A High Grade Tool

	Each
No. 9—Lever Feed	$7 50

Weight 60 Lbs. Each

[illegible] Frame [illegible] hard wood and well finished. [illegible] which makes a downward shearing cut against [illegible] cutting edge. The length of cut is adjustable from ¾ to 1½ [illegible]

Capacity per Hour—Dry Fodder, 150 to 200 Lbs.; Green 300 to 400 Lbs

	Each
No. 05—Complete, as shown	$14 00

Weight 170 Lbs. [illegible]

This is a very popular Hand Cutter and contains all the important features of the larger sizes, such as the change in the length of cut without changing gears, [illegible]

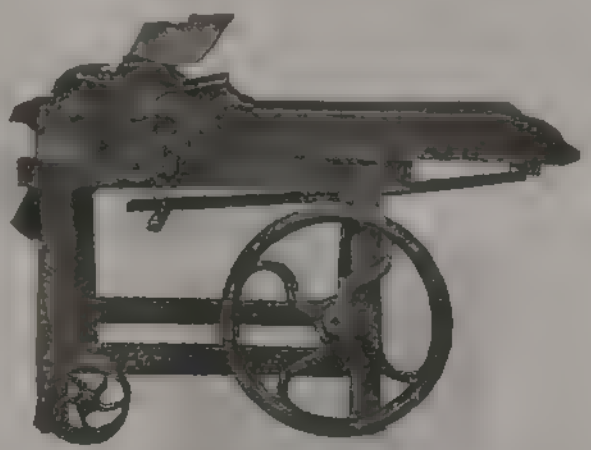
The Frame [illegible] hard wood with mortise and tenon joints. The Feed Table [illegible] Length. The Feed Rolls are governed by an equalizer bar and spring so that both ends of Feed Rolls are raised equally and there is no binding in the boxes. This machine has the Adjustable Cone Gearing by which length of cut is changed. It has two 8½ in. Knives made of Tempered Steel. The Knives make a downward shearing cut against a hardened cutting bar, ground true. The length of cut is adjustable—¾, ⅝ or 1 inch.

Capacity per Hour

Dry Fodder, 150 to 200 Lbs.; Green Fodder, 300 to 400 Lbs

	Each
No. 07—Complete, as shown	$20 00

Weight 170 Lbs. Each



POWER FEED CUTTER

The large Feed Throat reduces the labor of feeding. The Feed Rolls are large and the pressure is controlled by a Spring Board acting [illegible] Equalizer Bar preventing all cramping or binding in boxes.

This Cutter is furnished with Four 11½ in. Knives which make a downward shearing cut against a reversible tool steel cutting bar. It provides Four Cutting Edges, all of which can be used before it is necessary to regrind. The Knives and Cutting Bar are Tempered Tool Steel. The Knives are reversible and adjustable and can be sharpened with [illegible] The Feed Gearing consists of a Sliding Cone Gear, which can be quickly moved on its shaft to make any length of cut. All the running parts of the machine are controlled by the Safety [illegible] Clutch Pulley, and can be instantly stopped or started. The Main Shaft is extended on both sides so that either balance wheel [illegible] placed on either side. Can be used as a Hand Cutter [illegible] by a Crank on the main Shaft. Crank is extra and is furnished [illegible]

Length of Cut [illegible] ¾ in. or 1 in. By removing two opposite knives length of cut will then be ½ in., 1 in., 1½ in. or 2 in.

Capacity per Hour—Dry Fodder, 1 to 1½ Tons; Green Fodder, 2 to 3 Tons

Power Required—1 to 2 Horse Power.

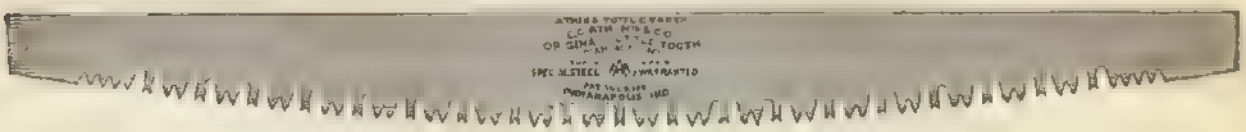
Speed—400 to 500 Revolutions per Minute.

	Each
No. 11—Complete, as shown, with 10 in. Diam., 4 in. Face Pulley; Weight, Complete with Pulley, 380 Lbs. Each	$40 00
Crank for Above Cutter	[illegible] 20
Shredder Head for Above Cutter	[illegible] 20

Prices furnished on application on Power, Feed and Ensilage Cutters, wood frame and steel [illegible] Ensilage Carriers, Blower Elevators for getting ensilage [illegible] and Power Corn Shellers

CROSS-CUT SAWS

ATKINS THIN BACK TUTTLETOOTH



Special Steel, 14 x 18 Gauge

No. 331. Length, feet	5	5½	6	6½	7
Each	$2.60	2.86	3.12	3.38	3.64

Special Steel, 14 x 19 Gauge

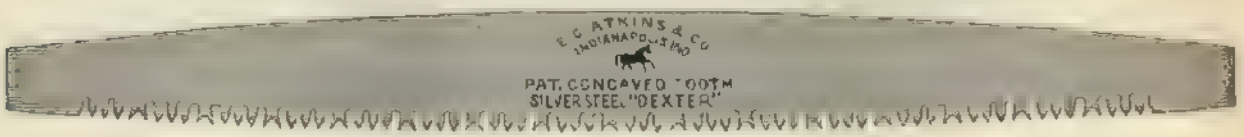
No. 332. Length, feet	5	5½	6	6½	7
Each	$3.10	3.36	3.62	3.88	4.15

ATKINS DIAMOND TOOTH

Special Steel, 14 x 18 Gauge

No. 222. Length, feet	5	5½	6	6½
Each	$3.00	3.30	3.60	3.90

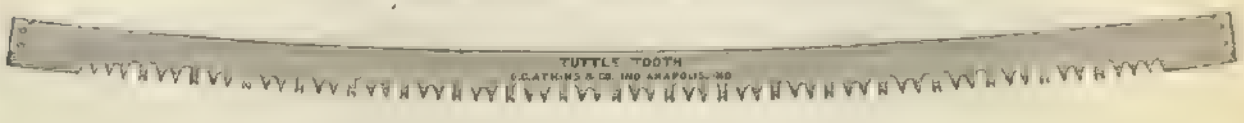
ATKINS CONCAVE TOOTH DEXTER



Special Steel, 14 x 19 Gauge

No. 220. Length, feet	5½	6	6½
Each	$4.40	4.80	5.20

ATKINS SHEFFIELD NARROW HOLLOW BACK TUTTLETOOTH



High Grade Special Steel

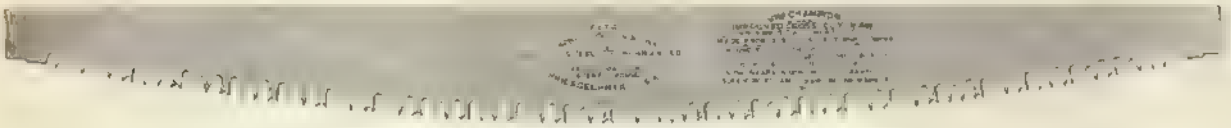
No. 379. 3¼ in. wide. Length, feet	5	5½	6	6½
Each	$1.30	1.43	1.56	1.69

ATKINS NARROW HOLLOW BACK DIAMOND TOOTH

No. 384. 3¼ in. wide. Length, feet	5	5½	6	6½
Each	$1.50	1.65	1.80	1.95

CROSS-CUT SAWS

DISSTON'S DIAMOND POINT "VIM" CHAMPION



Five Gauges Thinner on Back Than on Tooth-Edge

Vim Champion. Length, feet	5	5½	6	6½
Each	$4 55	5 30	6 20	7 10

TUTTLETOOTH

"Cut Easy." 14x19 gauge. Length, feet	5	5½	6	6½
Each	$			

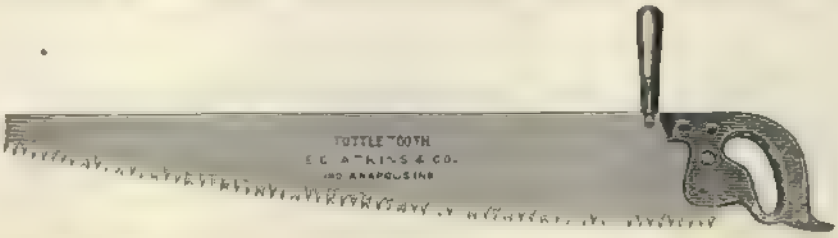
NARROW TUTTLETOOTH

"Cut Easy." Length, feet	5	5½	6	6½
Each	$			

ONE MAN CROSS-CUT SAWS

"Cut Easy." Length, feet	3	3½	4	4½	5
Each	$				

ATKINS SHEFFIELD ONE MAN TUTTLE TOOTH CROSS-CUT SAWS



No. 390. Special steel. Length, feet	3	3½	4	4½	5	5½
Each	$1 68	1 96	2 24	2 52	2 80	3 08

Crystal Regulators

8-Day, Half-Hour Gong Strike. 4-Inch Visible Escapement Porcelain Dial, Arabic or Roman. Beveled Plate Glass Front, Sides and Back. Finished in Rich Gold. Can Be Supplied With Plain Porcelain Dials, Solid White or Decorated.

8374
Made by the Ansonia Clock Co.
Height, 12 inches.
Width, 8 inches.
Price, each, **$30 00**

8375
Made by the Ansonia Clock Co.
Height 10½ inches.
Width 6½ inches.
Price, each, **$30 00**

8376
Made by the New Haven Clock Co.
Height, 12 inches.
Width 8½ inches.
Price, each, **$40 00**

8377
Made by the Ansonia Clock Co.
Height, 15½ inches.
Width 8½ inches.
Price each, **$50 00**

8378
Made by the Waterbury Clock Co.
Rich Gold Plated, Cut Glass Columns,
8-Day Half-Hour Strike, Gong.
3½ Inch Ivory Dial, Ivory Center, Visible Escapement, Cast Gilt Bezel, Beveled Glass Front, Sides and Back.
Height 13½ inches, Width 9 inches.
Price each, **$60 00**

8379
Made by the New Haven Clock Co.
Height 14½ inches.
Width 7 inches.
Price each, **$40 00**

All Prices Subject to the Regular Discount, Except Those on Diamonds. Pages 1 to 16.

Chadwick Great Six

"The Car of Exclusiveness"

Can be depended upon to give the maximum of satisfaction even under the most exacting road conditions. Five "repeat" orders recently booked show how Chadwick car owners regard their investment.

Catalogue upon request

Chadwick Engineering Works

POTTSTOWN, PENNA.

LIGHT or WATER

HAM'S "VENUS" Cold Blast Tail Lamp

We supply you with the one and save you the other.

"America's Best Auto Lamps" ¶ HAM'S Auto Lamps are recognized as *the best* in the Motor World.

¶ The "Ideal" Carriage Washer and Automatic Water-Saver which we now manufacture are unique and popular necessities for washing automobiles properly.

WRITE US!

THE "IDEAL" Carriage Washer

C. T. HAM MFG. CO., Rochester, N. Y.

DASH LANTERNS

MARSWELLS

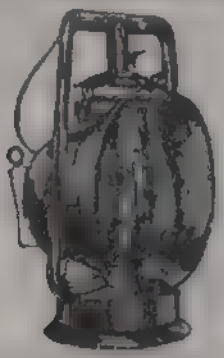
No 2D —Co... Blast, No. 2 Burner, No. 0 ... Per Doz...
... Globe, Height 15 in. Extra Heavy Tin Body and Large Oil Font ... Lantern cannot be blown out ... $24 00
Half Doz. in a Case; Wt. 80 Lbs. per Doz.

MARSWELLS

Per Dozen
No OD—Hot Blast, No. 1 Burner, No. 0 Globe, ⅝ in. Wick, Height 12½ in., holds 1 Pint, burns 17 hours..... $13 50
Half Doz. in a Case; Wt. 72 Lbs. per Doz.

MIDGET MARSWELLS

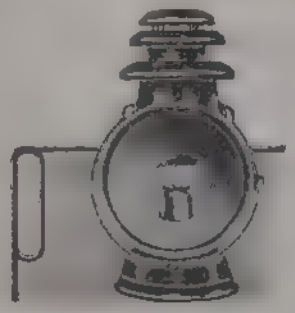
Per Dozen
No MD ... Blast, No. 1 Burner ... Wick, Seamless Globe, Height 12 in., ... Large Oil Font, Extra Heavy ... Lantern for Hard Service; will stand Rough Handling and Long Service; with Red Bull's Eye in rear to conform to new State Laws for vehicles.....$15 00
Half Dozen in a Case, Wt. 45 Lbs. per Doz.



MARSWELLS HOOD REFLECTOR

Bright Tin, with Hand Bail and Dash Attachment, is an excellent Lantern for the Stable and Porch used for night driving; throws a strong light more than 100 feet.

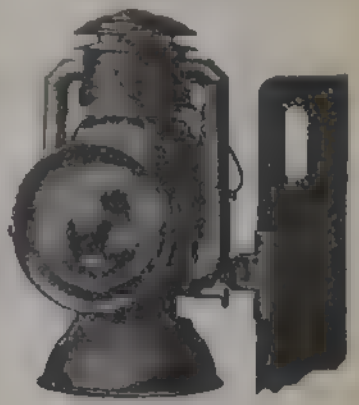
Per Dozen
No. OHF—No. 1 Long Cone Burner, ⅝ in. Wick; No. 0 Globe; Fitted with a 5 in. Silvered Glass Reflector, Retinned Hood 6 in. Deep, Height 13 in.; holds ¾ Pint, Burns 15 hours.....$22 00
Half Dozen in Case. Wt. 64 Lbs. Dozen



HEAVY DRIVING

20 Candle Power, Perfect Combustion, has Hand Bail and can be ... Side of Dash or to Carriage ... Holder; throws strong Light 200 ft. or more

Per Dozen
No. 200—Japanned Steel Body, 11 in. High, Plate Glass Lens, 5 in. Diam.; Burner takes ½ in. Wick, Reservoir Holds 1½ Gills of Oil, will burn nearly 10 Hours at one Filling $42 00
Half Dozen in Case; Wt. 70 Lbs. Dozen.
Extra Holders, to attach to Side of Dash.. 4.00



LIGHT DRIVING Per Dozen
No. 252—4 in. Double Convex Lens, 4 in. Silvered Reflector, ¾ in. Kerosene Burner; Height 10 in.; Tin, Nickel Plated, Capacity 7 Oz., will burn 10 Hours at One Filling; Complete with Dash Clamp $54 00
Half Dozen in Case; Wt. 30 Lbs. Dozen
Seat Rod Brackets for above Lamp 6 00

RAILROAD AND CONDUCTORS' LANTERNS

RAILROAD

Per Dozen
No. 39W—Bright Tin, No. 1 Special Outside Ratchet Burner with Long Shaft, ⅝ in. Wick, No. 39 White Globe, Double Wire Guard; uses Signal Oil; will Burn 24 Hours; Flame can be regulated from outside without removing Fount. $16.00
One Doz. in Case; Wt. 47 Lbs. Doz.

RAILROAD

Bright Tin, No. 1 Outside Ratchet Burner, ⅝ in. Wick, No. 39 Globe, Double Wire Guard; uses Signal Oil (1 Part Kerosene, 2 Parts Lard); Will burn 18 Hours; Constructed so that Wick can be raised or lowered from Outside, without removing Oil Fount.

Per Dozen
No. 39C—With Clear Globe $12.00
No. 39R—With Ruby Globe. 15.00
One Doz. in Case, Wt. 50 Lbs. Doz.

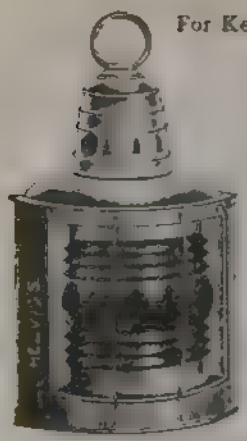
QUEEN, CONDUCTOR

Heavy Brass, Nickel Plated, Hinged Top, Removable Fount, Spring Globe Holder, No. 1 Burner, ⅝ in. Wick, Queen Globe, ... Signal Oil, will burn about 15 Hours.

Per Doz.
No. CC—With Clear Globe... $ 9 00
No. CG—With Half Green Globe 10 25
No. CR—With Half Ruby Globe 10 75
One Doz. in Case; Wt. 75 Lbs. Doz.

MARINE SIGNAL LIGHTS

For Kerosene; Galvanized Iron, No Chimney, Fresnal Glass Globe, Polished Reflector
Guaranteed to burn in any and all Weather Conditions

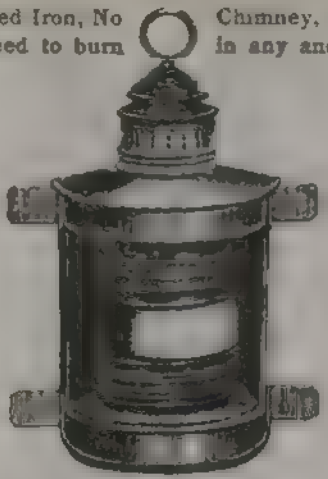


SIDE LIGHTS — Each

No. 9S—Green, Starboard or Right Side Light, 5¾x6½ in. Globe; No. 1 Burner; Tin Wick, Height 15 in.; Width of Base 10 in.; Holds 2 Pts., Burns 24 Hours ... $6 00

No. 9P Red, Port or Left Side Light, otherwise as Above ... 6 00

Weight 7¾ Lbs. Each



BOW LIGHTS — Each

No. 14 Clear Globe, 6½ in. High; No. 1 Burner; Tin Wick, Height 15 in., Width at Base 9½ in.; Holds 2 Pts., Burns 24 Hours ... $8 00

Weight 6½ Lbs. Each

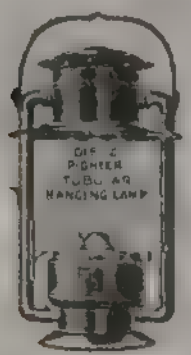
ANCHOR LIGHTS — Each

No. 22 Clear Globe, 5½ in. High; No. 1 Burner; Tin Wick, Height 18 in., Holds ¾ Pint, Burns 28 Hours ... $8 50

Weight 6¾ Lbs. Each

STREET LAMPS

Can be regulated to burn 4, 6, 8, 12, 16, 20 or 24 hours and automatically extinguish, Burns Kerosene; Tin Frame, Painted Green



GLOBE HANGING — Each

No. 3H 22 ½ Candle Power, 22 in. High, No. 3 Burner, 1½ in. Wick, No. 3 Globe; Filled, Lighted and Regulated from Outside; Burns 24 Hours ... $5 00

Weight 24 Lbs. Each

GLOBE POST — Each

No. 3P 22 ½ Candle Power, 27 in. High, No. 3 Burner, 1½ in. Wick, No. 3 Globe; Filled, Lighted and Regulated from Outside; Burns 24 Hours ... $5 00

Weight 26 Lbs. Each

With Socket for Post or Bracket

SQUARE POST — Each

No. 2P—22½ Candle Power, 30 in. High, no Globe or Chimney; Burner is easily replaced by Duplex No. 3 Burner, 1½ in. Wick, Burns 24 Hours ... $11 00

Weight 35 Lbs. Each

An ordinary Gas Street Light is from 12 to 16 Candle Power
All Above, One in a Case; Except Marine Lights, which are Open Stock

TUBULAR LAMPS

For Kerosene; Japanned Tin; no Chimney to smoke; Light equal to Gas at less cost, regulated from Outside; not affected by wind; with Bail Handle

Square — Each

No. 2S 9"x10" in. Square, 21 ½ in. High, Silvered Glass Reflector; No. 2 Burner, 1½ in. Wick, Burns 18 Hours; Japanned Blue; Weight 21 Lbs. Each ... $7 00

No. 3S 10½x12 in. Square, 29 in. High, 12 in. Silvered Glass Reflector; No. 3 Burner, 1½ in. Wick, Burns 28 Hours; Japanned Blue; Weight 33 Lbs. Each ... 8 50

CADET LANTERNS

BOY OR CADET

Per Dozen

No. 10 All Brass Height 7½ in., Fitted with Brass Bail, Polished Brass Reflector, Side Glass, No. 0 Convex Burner, Fitted with ⅝ in. Wick ... $5 00

One Dozen in a Box; Weight 7 Lbs. per Dozen

DAYTON FARM HOUSE OR RESIDENCE ELECTRIC LIGHTING OUTFITS

All for Direct Shipment from Factory

The progressive farmer has now reached the stage when he desires something safer and more convenient in the way of lighting than the lantern and oil lamp. These outfits are especially designed to meet his needs as well as for lighting residences and small hotels in small towns which have no municipal lighting plants

No. 8—EIGHT LIGHT, 13 VOLT, OUTFIT

This outfit produces ample current for lighting ten 8 Candle Power, eight 12 Candle Power or six 16 Candle Power 13 Volt Lamps at one time. Designed to give complete electric service for farm houses of average size. The battery of this outfit will carry the lights recommended for over 8 hours on one charge. As this outfit is designed to carry a considerable overload more lamps may be wired in (say 12 to 15), but we do not recommend using all of them at once for a considerable length of time; for instance you can install one or two 25 Candle Power, two or three 16 Candle Power and about ten 8 Candle Power lights in the bedrooms, kitchen and barn and the entire equipment may be used successfully without overworking either the dynamo or battery.

This outfit consists of the following

	Each
Dayton Dynamo, Type K, 10 Amperes, with Belt Driving Pulley	$ 80.00
Dayton Switchboard, No. K8	120.00
Dayton Special Glass Jar Storage Battery, No. 1E, 6 Cells, 13 Volt, 100 Amp-hour capacity	150.00
Complete Outfit without Engine, Lamps, Wire or Fixtures	*350.00

Shipping Weight 705 Lbs.

No. 15—FIFTEEN LIGHT, 13 VOLT, OUTFIT

This outfit will produce sufficient current to operate fifteen 12 Candle Power, 13 Volt Lamps. The battery will carry the lights recommended for over eight hours on one charge

Consists of the following	Each
Dayton Type L Dynamo, 15 Amperes, with Belt Driving Pulley	$100.00
Dayton Type KS Switchboard	120.00
Dayton Type 2E Storage Battery, 6 Cells, 13 Volt, 150 Amp-hour capacity	200.00
Complete Outfit without Engine, Lamps, Wire or Fixtures	*420.00

Shipping Weight 841 Lbs.

No. 20—TWENTY LIGHT, 13 VOLT, OUTFIT

Produces ample current for twenty 12 Candle Power or fifteen 16 Candle Power 13 Volt Lamps. The battery of this outfit will carry the lights recommended for over eight hours on one charge.

Consists of the following	Each
Dayton Dynamo Type L Special, 20 Ampere, with Belt Driving Pulley	$130.00
Dayton Switchboard, No. LS	170.00
Dayton Special Storage Battery, No. 3E, 6 Cells, 13 Volt, 200 Amp-hour capacity	250.00
Complete Outfit without Engine, Lamps, Wire or Fixtures	*550 00

Shipping Weight 1193 Lbs.

No. 30—THIRTY LIGHT, 30 VOLT, OUTFIT

Capacity thirty 12 Candle Power or Twenty-three 16 Candle Power, 30 Volt, Mazda Tungsten Lamps.

Consists of the following	Each
Dayton Dynamo, Type M, 12 Amperes	$130.00
Dayton Switchboard, Type MS	170.00
Dayton Storage Battery, Type 6E, 15 Cells, 30 Volt, 100 Amp-hour capacity	400.00
Complete Outfit without Engine, Lamps, Wire or Fixtures	*700.00

Shipping Weight 1558 Lbs.

We can furnish these Farmhouse Lighting Outfits up to 200 Light capacity: Prices on application

DAYTON LAUNCH LIGHTING OUTFIT

No. 8L—EIGHT LIGHT, 12 VOLT, OUTFIT

This outfit is of the Dynamo Storage Battery Type, in which the dynamo charges the battery, the current for operating the lights being drawn from the battery at all times. It contains a Switchboard, which makes all necessary connections between the dynamo and the battery, and by the means of its meters shows you the exact condition of your current supply at all times

Capacity—Eight 12 Candle Power Tungsten Lamps, or their equivalent in lamps of other Candle Power, as desired. The battery will carry this load for eight hours on one charge.

Consists of the following	Each
Dayton Type K Dynamo, with Belt Driving Pulley and Sliding Base	$ 80.00
Dayton Switchboard No. 60	100 00
Hubler-Dayton Storage Battery No. 77 D, 12 Volt, 85 Amp-hour capacity	140 00
Complete without Engine Lamps, Wire or Fixtures	*320 00

Shipping Weight 203 Lbs. Each

We can furnish these Launch Lighting Outfits for 3-Light, 6-Light, 15-Light, and Arc-Searchlight Outfit; Prices on application

DECOYS

WOOD DECOY DUCKS

With Tack Eyes; Made of Selected, Thoroughly Seasoned White Cedar, Painted True to Life

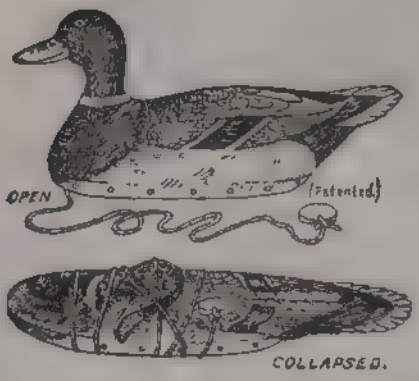
	Per Dozen
No. 1—Mallard	$9 00
No. 2—Canvas Back	9 00
No. 3—Red Head	9 00
No. 4—Blue Bill	9 00
With Glass Eyes; Otherwise Same as Above	
No. 10—Mallard	$10 00
No. 20—Canvas Back	10 00
No. 30—Red Head	10 00
No. 40—Blue Bill	10 00

One Dozen, 4 Females and 8 Males in a Crate
Weight 42 Lbs. per Dozen

WEEDLESS DECOY ANCHORS

	Per Dozen
No. 150—Weedless Decoy Anchors, Cone Shape, Cast Iron	$1 00

Weight 6 Lbs. per Dozen



AUTOMATIC CANVAS DECOY DUCKS

Expands automatically when anchor cord is unwound; packs in small space, light in weight; quickly collapsed; come right side whenever tossed into water, not affected by stray shots.

	Per Dozen
No. 6—Mallard; Hand Painted	$9 00

Complete with Anchors and Cord.
One Dozen in a Neat Box, with Handle; 8 Males and 4 Females
Weight 14 Lbs. per Dozen

ILLINOIS RIVER FOLDING DUCKS

In Groups of Three, connected with a Long [illegible] to be set out with a Bird on each End of Frame, securely held in place with a spring. Complete with Anchor; when not in use can be Folded Flat, made of Wood, Painted True to Life. Note how Light.

	Per Dozen
No. 7—Mallard	$6 00
No. 8—Blue Bill	6.00
No. 9—Canvas Back	6.00

One Dozen, Two Females, Male, One-Third Packed in a Neat Box with Handle
Size 22x9x6½ in.
Weight 8 Lbs. per Dozen

FOLDING GEESE

FOLDING GEESE

Sheet Iron with latest improved legs and neck, well painted

	Per Dozen
No. 1G—Profile Goose, without wings	$5 00
No. 2G—Profile Goose, with wings	[illegible]

One Dozen in a Case
Weight, without wings 24 Lbs.; with wings 30 Lbs.

GRASS SUITS AND BLINDS

Suitable for Duck, Wild Goose and all Kinds of Shore Bird Shooting; make Perfect Artificial Blinds

Per Suit

Grass Suits, consisting of Coat, Cape or Hood, all made of Long, Tough Marsh Grass; are Convenient to Wear and Shoot from; Practically Waterproof and Suitable for use in any Weather. $2 00

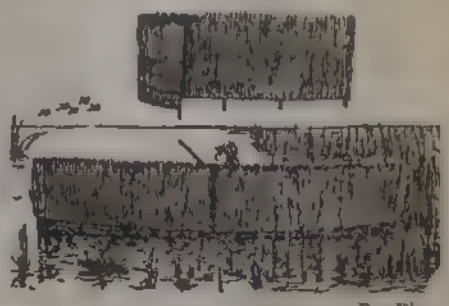
Weight 4 Lbs. Each

Per Piece

Grass Shore Blinds, Size 6 ft. Long by 3 ft. High, made to Resemble Rushes or Marsh Grass. Supplied with Sticks for Setting up [illegible] $2.50

Weight about 8 Lbs. Each

Note—2 Pieces usually make a Blind



Per Piece

Grass Boat Blinds, Size 6 ft. Long by 2½ ft. High, made to resemble Rushes and Marsh Grass; supplied with Sticks and Screw Eyes for Attaching to Boat. $2 50

Note—4 Pieces make a Blind sufficient to go around the average Duck Boat.

When not in use, these blinds can be rolled up and carried in a small space

WATERPROOF OILED CLOTHING

TOWER'S FISH BRAND, BEST GRADE

TOWER'S FISH BRAND

Highest Quality, Made of Selected Materials, Double Throughout and Absolutely Waterproof, Suitable for Fishermen, Sailors, Miners, Teamsters, Laborers, Stockmen, Farmers, Lumbermen, etc.; Not Sticky nor Greasy.

TOWER'S FISH BRAND

When Ordering Goods, on this page, be sure to give Size Wanted.

SLICKERS, FISH BRAND

Made Double Throughout, with Storm Lap, Flannel Lined Collar with Throat Piece Storm Lap is Inside, Out of Sight and reaches to a point below the Knee; Reflex Edge prevents water running in at front; Five Buttons; Half Length Flannel Inner Sleeve with Elastic Cuff which prevents water from running up the Arm; One Outside Pocket with Flap; 27 in. Split in Back gives freedom at the legs.

	Per Dozen
No. 20S—Yellow; All Sizes	$42.00
No. 20SB—Black; All Sizes	37.80

Size Nos.	0	1	2	3
Breast, In.	56	54	52	50
Length, In.	60	58	56	54

Average Weight 61 Lbs. per Dozen

POMMEL SLICKERS, FISH BRAND

For riding, completely covering rider and saddle. Made with Extension Pockets and Gusset in back fitting the body of the horse in front and back. For walking, the Extensions are buttoned up. Especially useful as a camp blanket on account of extra width.

Otherwise same as No. 20S shown above.

	Per Dozen
No. 20PS—Yellow; All Sizes	$42.00

Size Nos.	0	1	2	3
Breast, In.	56	54	52	50
Length, In.	62	61	59	57

Average Weight 63 Lbs. per Dozen

FROCKS OR HALF COATS, FISH BRAND

Made Double Throughout, with Storm Lap, Flannel Lined Collar; Storm Lap is Inside, Out of Sight and reaches to a point below the Knee; Reflex Edge prevents water running in at Front; Five Buttons; Half Length Flannel Inner Sleeve With Elastic Cuff which prevents water from running up the Arm; One Outside Pocket with Flap.

	Per Dozen
No. 20F—Yellow; All Sizes	$25.20

Size Nos.	0	1	2	3
Breast, In.	54	52	50	48
Length, In.	38	38	38	38

Average Weight 42 Lbs. per Dozen

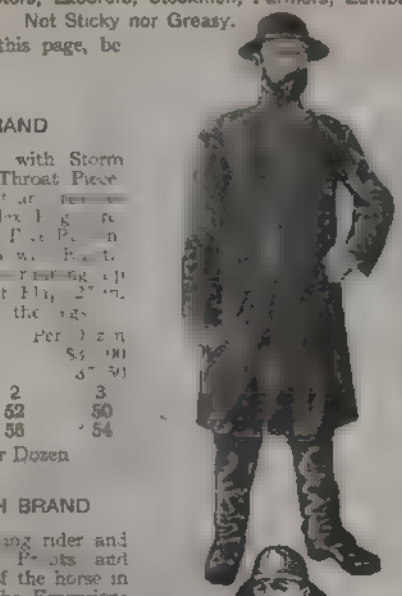
STRING PANTS, FISH BRAND

Made Double Throughout, Waist is Adjustable to Any Size by means of a Draw String through Waist Band.

	Per Dozen
No. 20SP—Yellow; All Sizes	$16.80

Size Nos.	0	1	2	3
Waist, In.	48	46	44	42
Inseam, In.	30	29	28	27

Average Weight 32 Lbs. per Dozen



MEDIUM LONG COATS, FISH BRAND

Made Double Throughout with Storm Lap, Flannel Lined Collar; Storm Lap is Inside, Out of Sight and reaches to a point below the Knee; Reflex Edge prevents water running in at Front; Five Buttons; Half Length Flannel Inner Sleeve with Elastic Cuff which prevents water from running up the Arm; One Outside Pocket with Flap.

	Per Dozen
No. 20MC—Yellow; All Sizes	$28.80

Size Nos.	0	1	2	3
Breast, In.	58	54	52	50
Length, In.	44	44	44	44

Average Weight 48 Lbs. per Dozen

JACKETS, FISH BRAND

Made Double throughout, with Storm Lap

	Per Dozen
No. 20J—Yellow; All Sizes	$17.40

Size Nos.	0	1	2	3
Breast, In.	54	52	50	48
Length, In.	31	30½	30	30

Average Weight 33 Lbs. per Dozen

OVERALLS, FISH BRAND

With Apron, made Double throughout

	Per Dozen
No. 20—Yellow; All Sizes	$17.40

Size Nos.	0	1	2	3
Waist, In.	48	46	44	42
Inseam, In.	29	28	27	26

Average Weight 32 Lbs. per Dozen

HATS

Lined with Cotton, Double Cotton Earflaps with Band under Chin, Button Fastening

Particularly Suited for Miners' use, as it has Leather Strip on Front for attaching Lamp.

	Per Dozen
No. 20H—Yellow; All Sizes	$4.80

Size Nos.	1	2	3	4
Size Head	6¾	7	7¼	7½

Best Suited for Teamsters, Laborers, Sailors, Fishermen, etc.

	Per Dozen
No. 20HB—Black; All Sizes	$3.90

Size Nos.	1	2	3	4
Size Head	6¾	7	7¼	7½

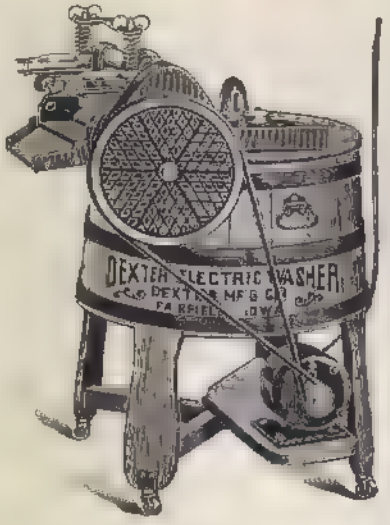
Average Weight 4½ Lbs. per Dozen

For Sportsmen's Hats and Caps, see page 3054

Famous "DEXTER" Washers

The improved 1912 models for Electric Motors and Gas Engines show a dozen distinctive features that make a hit with any prospective customer.

Every Undesirable Feature Avoided



No exposed machinery—no large, open flywheel—no threatening cog-bar across the air—no awkward rocker-arm at the side of the tub—no dangerous chain or shaft drive to the wringer. All moving parts totally enclosed in smooth, metal cases—one lever gives absolute control—so safe and so simple any child can operate it easily.

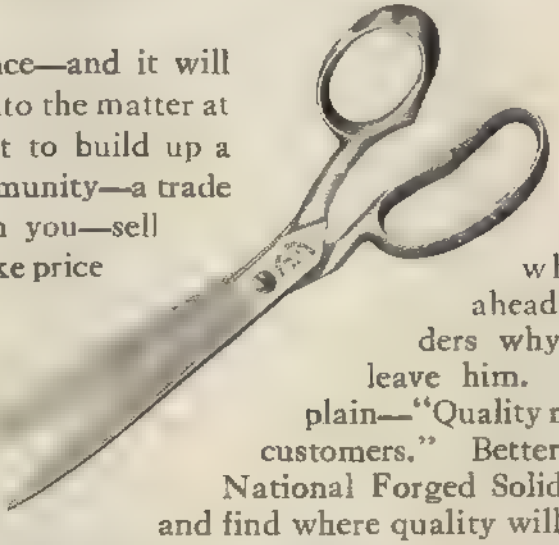
Dexter Washers are profit producers and business builders—you'll be lucky if you get the agency for your town

Write today for full information and special offer.

DEXTER MFG. CO., Fairfield, Iowa

FORGED SOLID STEEL SHEARS
VERSUS
CAST STEEL SHEARS

There is a difference—and it will pay you to look into the matter at once. If you want to build up a trade in your community—a trade that will stay with you—sell them quality. Make price secondary.



Better Write Us Today for Catalog

Many a dealer who puts price ahead of quality wonders why his customers leave him. The reason is plain—"Quality makes and keeps customers." Better put in a line of National Forged Solid Steel Shears—and find where quality will tell.

THE NATIONAL CUTLERY COMPANY
PHILADELPHIA

DROP FORGED STEEL WRENCHES

STRONGER, LIGHTER AND MORE ACCESSIBLE THAN ADJUSTABLE WRENCHES AND WILL NOT INJURE HEADS OR NUTS BY SLIPPING OFF

DESCRIPTION OF FINISHES

Unfinished denotes a Wrench with Milled Openings, unpolished

Semi-Finished denotes a Wrench with Milled Openings, case hardened or tempered, polished Heads

Finished denotes a Wrench with Milled Openings, case hardened or tempered, full polished Heads with Mottled Body

GENERAL PURPOSE WRENCHES

A Handy Tool for Farmers, Mechanics, Automobilists, Implement Men, etc.

Assortment in Wood Box

Size Nos.	00	-01	-02	-03	-04
Length, In.	6¼	7⅛	8¼	9½	10¾
Head, In.	⅜	½	⅝	¾	⅞
Opening, In.	⅜, ½	½, ⅝	⅝, ¾	¾, ⅞	⅞, 1
Per Bolts, In.	⅛, ¼	¼, ⅜	⅜, ½	½, ⅝	⅝, ¾
Weight, Oz.	2	4	6¼	11½	16

UNFINISHED

Size Nos.	400	401	402	403	404
Each, Open Stock	$0 13	.17	.22	.28	.34

Per Set of Five

No. 440—In Neat Wood Box $1 30

No. 444—In Canvas Roll 1.59

SEMI-FINISHED

Size Nos.	300	301	302	303	304
Each, Open Stock	$0 20	.25	.33	.42	.51

Per Set of Five

No. 333—In Canvas Roll $2 40

FINISHED

Size Nos.	200	201	202	203	204
Each, Open Stock	$0 26	.34	.44	.56	.68

Per Set of Five

No. 222—In Canvas Roll $3 10

NICKEL PLATED

Size Nos.	100	101	102	103	104
Each, Open Stock	$0.52	.68	.88	1.12	1 36

Per Set of Five

No. 111—In Canvas Roll $4 75

Assortment in Canvas Roll

TEXTILE MACHINE WRENCHES

15 Degrees Angle, Double End, Milled Openings for U. S. Standard Square or Hexagon Nuts, Specify whether Finished or Semi-Finished is Wanted.

Nos	Bolts Size Inches	Opening Inches	Length Inches	Thickness of Heads Inches	Each Finished	Each Semi-Fin.
760B	⅛, ¼	⅜, ½	4¾	¼	$0.30	.23
761C	⅛, ⅜	⅜, ½	5¾	⅜	.40	.30
763A	⅛, ½	½, ⅝	8¼	⅝	.60	.45
764B	¼, ⅝	½, ¾	9½	½	.76	.57
765C	¼, ⅞	1⅛, 1⅜	11	⅝	1.00	.75

Open Stock; Weights 2, 4, 12, 18 and 27 Oz. Each

IN CANVAS ROLLS

Per Set

No. 555—Semi-Finished, One of Each $2 55

No. 666—Finished, One of Each 3 30

DOUBLE END "S", FINISHED

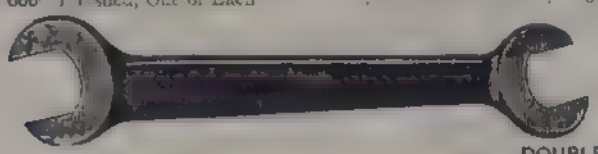
22½ Degree Cut, Polished, Case Hardened; Milled Openings for Hexagon Nuts. Handy for Farmers, Machine Operators, Automobilists, also used by Machinists, etc., especially for work in cramped places.

Size Nos.	70	71	72	73	74	75
Length, In.	4	5	6	7	8	9
Size Openings, In.	⅜, ⅞	½, ⅝	¾, ⅞	⅞, 1	1, 1⅛	1⅛, 1¼
Thickness Head, In.	¼	⅜	⅜	½	½	⅝
Weight Dozen, Lbs.	1½	3½	6	10½	15	21
*Each	$0 52	.68	.88	1 12	1.44	1.92

Open Stock

Per Set of Five

No. 777—One Each Size 70, 71, 72, 73 and 74 in Canvas Roll $4 64



DOUBLE END WRENCHES

UNFINISHED

Milled Openings

15 Degree Angle, for U. S. Standard Nuts, either Square or Hexagon

Nos.	U. S. Standard Nuts, Bolts, Size	Milled Openings, Inches	Extreme Length, Inches	Thickness of Heads, Inches	Weight Dozen, Pounds	*Each
N289	¼, ⅜	⅜, ½	5	⅜	2	$0.36
N293	⅜, ½	½, ⅝	6½	½	6	.52
N294	⅜, ½	½, ⅝	7	½	7	.56
N297	½, ⅝	⅝, ¾	9	⅝	12	.72
N298	½, ⅝	⅝, 1⅛	10½	⅝	17	.80
N301	⅝, ¾	1⅛, 1¼	12	¾	24	1.16
N303	¾, ⅞	1¼, 1⅜	13¾	⅞, 1	36	1 52
N304	⅞, 1	1¼, 1⅝	14¾	1	41	1 76
N305	⅞, 1	1⅜, 1⅝	15¾	1	45	2 09

FINISHED

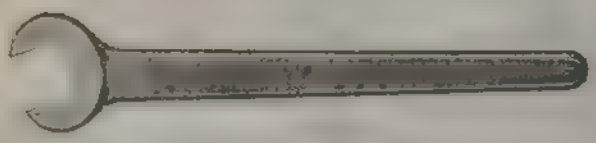
Case Hardened, Milled Openings

15 Degree Angle, for U. S. Standard Nuts, either Square or Hexagon

Nos	U. S. Standard Nuts, Bolts, Size	Milled Openings, Inches	Extreme Length, Inches	Thickness of Heads, Inches	Weight Dozen, Pounds	*Each
F289	¼, ⅜	⅜, ½	5	¼	2	$0 72
F293	⅜, ½	½, ⅝	6½	⅜	6	1 04
F294	⅜, ½	½, ⅝	7	⅜	7	1 12
F297	½, ⅝	⅝, ¾	9	½	12	1 44
F298	½, ⅝	⅝, 1⅛	10½	½	17	1 60
F301	⅝, ¾	1⅛, 1¼	12	⅝	24	2 32
F303	¾, ⅞	1¼, 1⅜	13¾	⅝, ¾	36	3 [illegible]
F304	¾, 1	1¼, 1⅝	14¾	¾	41	3 [illegible]
F305	⅞, 1	1⅜, 1⅝	15¾	¾	45	[illegible]

Open Stock

DROP FORGED WRENCHES



SINGLE END WRENCHES, FINISHED

Full Polished, Case Hardened, Milled Openings 15 Degree Angle, for U. S. Standard Nuts of the Same Hexagon

Size Nos	Size for Nuts	Opening	Length In.	Weight Doz., Lbs.	*Each
266	¼	⅜	3		$0.56
267	⅜	½	4		.68
268	½	⅝	5		.80
270	⅝	1⅛	10	12	1.28
271	¾	1⅜	11¾	15	1.68
272	⅞	1⅝	13½	25	2.32
27	1	1⅞	14	42	3.00
274	1⅛	1⅞	17	72	4.00
275	1¼	2	18½	90	5.00

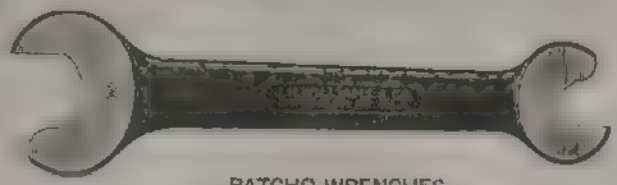
ABOVE WRENCHES IN SETS

5 Wrenches, One Each of Nos. 266, 267, 268, 270 and 271

*Per Set

No. 2666—In Heavy Canvas Rolls $5 00

Weight 3⅝ Lbs. Set



RATCHO WRENCHES

Has all the advantages of a Ratchet Wrench without its Mechanism to get out of order; the Rounded Corner on one Jaw allows a new hold to be taken on nut each time, without removing Wrench. Drop Forged Steel; Finished and Mottled Shank; Highly Polished Heads.

Size Nos	For Nuts, Hexagon	For Cap Screws U. S. Standard	Opening	Length In.	Weight Doz., Lbs.	*Each
1720	¼	¼	⅜, ½	4½	3	$0.72
1127C	⅜	⅜	½, ⅝	5½	3½	.88
1128	½	½	⅝, ¾	6½	6	.96
1729		⅝	¾, ⅞	6½	6	1 04
1134	⅝	¾	⅞, 1⅛	9⅞	12½	1 60
1735	¾	⅞, 1	1, 1¼	11⅞	22½	2.04

RATCHO WRENCHES IN SETS

Six Wrenches; One of Each Above Sizes in a Set

*Per Set

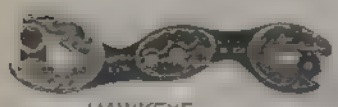
No. 1770—In Wood Box $7.24

No. 1777—In Heavy Canvas Roll 8 14

Weight 3 Lbs. per Set

ALLIGATOR WRENCHES

For Farmers, Pump Men, Machinists, Automobilists, Gas Fitters, Blacksmiths and Household Use, Etc.



HAWKEYE

[illegible] Pipe Wrench, and Thread Cutter

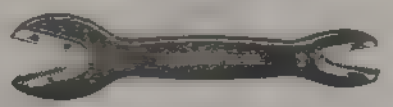
[illegible] Cocks, Etc. Per Doz.

[illegible] ings 1 and 1⅛ in., Takes Pipe [illegible] ¾ in.; Recuts ⅛, ¾ [illegible] Forged, Case [illegible] Dies per Dozen

BAXTER'S ADJUSTABLE

For [illegible] and For Ma[illegible] Pi[illegible] etc., Solid Steel, Full Polished; Adjustable by Knurled Screw

Length, In.	4	6	8	10
Opening, In.	¼–⅜	¼–1½	¼–1¾	½–2
Weight Doz., Lbs.	[illegible]	[illegible]	16	32
Per Dozen	$6 00	9 00	12 00	18 00

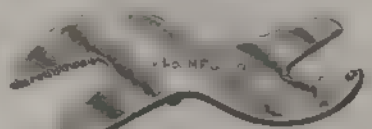


TWIN

Per Dozen

Solid Steel, Drop Forged, Oil Finish, Length 10 in.; Takes Pipe ⅛ to ¾ in., Holds Round Iron ¼ to 1 in. $10 00

½ Dozen in Box; Weight 15 Lbs. per Dozen



ALWAYS READY

[illegible] Useful around Every Machinist and [illegible]

BLACK

[illegible]	101	102
[illegible]	5	7
[illegible]	¾, 1½	¾, 1
Weight Dozen, Lb	6	12
Per Dozen	$4.50	6 30

NICKEL PLATED

[illegible]	[illegible]	21½
[illegible]	5	7
[illegible]	¾, 1½	¾, 1
Weight Dozen, Lbs.	6	12
Per Dozen	$5 00	6 75

Half Dozen in a Box

Per Dozen

No. 31 Double End Alligator Wrench, Nickel Plated, Finish, Length 11½ inches, takes from ¼ to ¾ in. Pipe [illegible] Opening on the Jaw $2 40

[illegible] in a Box; Wt. 3 Lbs. per Dozen

Per Dozen

No. 1G—Drop Forged, Oil Finish, Polished, Length 9 in., Takes Pipe ⅛ to ½ in., Holds Round Iron ¼ to ½ in. $1 00

Half Dozen in a Box; Weight 10 Lbs. Dozen

Per Dozen

No. 1H—Solid Steel, Polished; Length 5¾ in.; Holds Pipe ⅛ to ⅜ in.; Holds Round Iron ¼ to ⅜ in. $2 00

One Dozen in a Box; Weight 3½ Lbs. Dozen

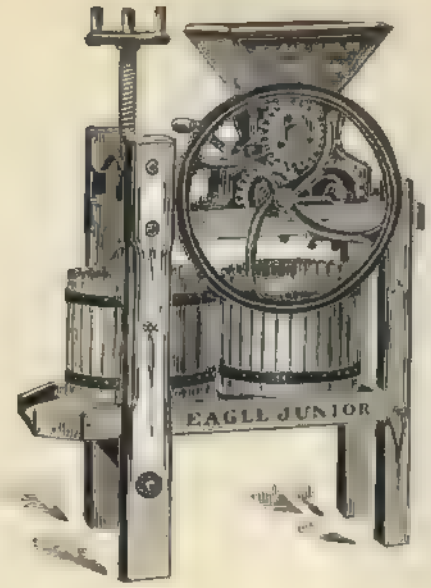
SOLID STEEL

Drop Forged, Oil Finish

Nos	9	16	22
Length In.	9	16	22
Holds Pipe, In.	⅜–¾	½–1¼	1¼–2
Holds Rd. Iron, In.	½–1	¾–1½	1½–2½
Wt. Doz., Lbs.	12	42	78
Per Dozen	$6.00	12.00	18.00

9 in., 1 Dozen in Box, Balance, Open Stock

CIDER MILLS



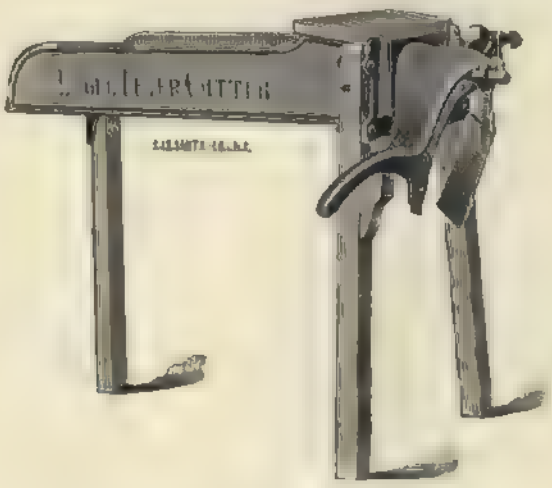
JUNIOR

Junior Cider Mills, posts are 3" x 3" x 2¼" [illegible] with two hubs 10 in. high x 10" in. inside diameter, the press screw is 1⅛ in. x 18½ in. long, capacity 2 to 4 barrels of cider per day, each.....$18.00

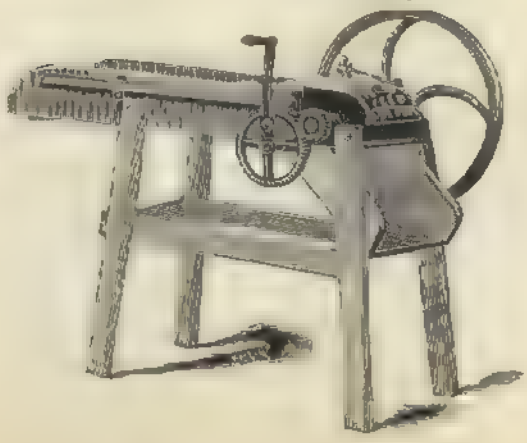
Medium Cider Mills, posts are 40 x 3⅜ x 2¼ in., furnished with two hubs 12 in. high x 12 in. inside diameter, the press screw is 1½ x 20 in. long, hopper is 14 x 14 in. inside, capacity 3 to 6 barrels of cider per day, each. 24 00

Senior Cider Mills, posts are 46 in. high x 15½ in. inside diameter, the press screw is 2 x 22 in. long, hopper is 13 x 15 in. inside, capacity 6 to 10 barrels of cider per day, each. $30 00

FEED CUTTERS



EAGLE "K. D." CUTTER

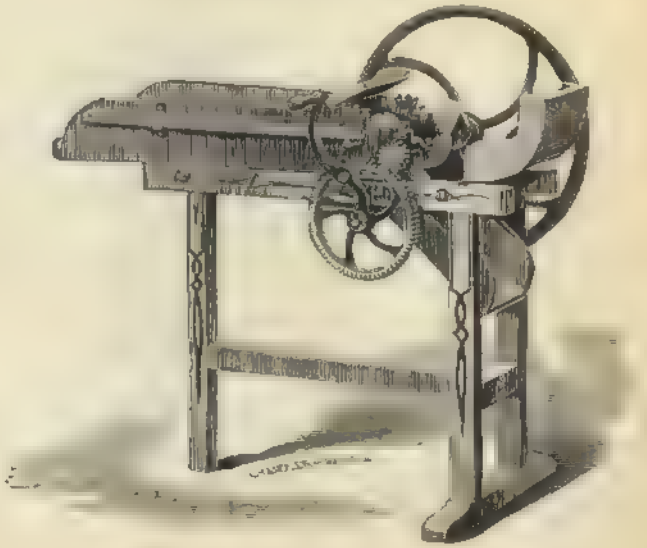


No. K. D. One 11 in. spiral knife, cuts four different lengths, heavy balance wheel. Weight 158 lbs., each.$15.00

EAGLE HAND LEVER CUTTER

No. 00. 10¼ in. knife, with adjustable gauge to regulate the feed any length up to 2¼ in. Weight 45 lbs., each..$4.00

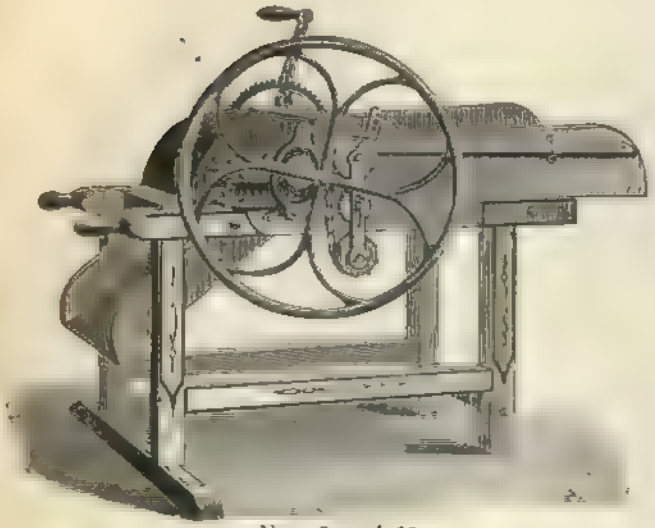
EAGLE HAND CUTTER



No. 0. Has one 8 in. knife, [illegible] feed, gear ratio 4 to 1. Cuts ½ or ⅜ in., [illegible] running. Weight 118 lbs., each $14 50

FEED CUTTERS

EAGLE, HAND

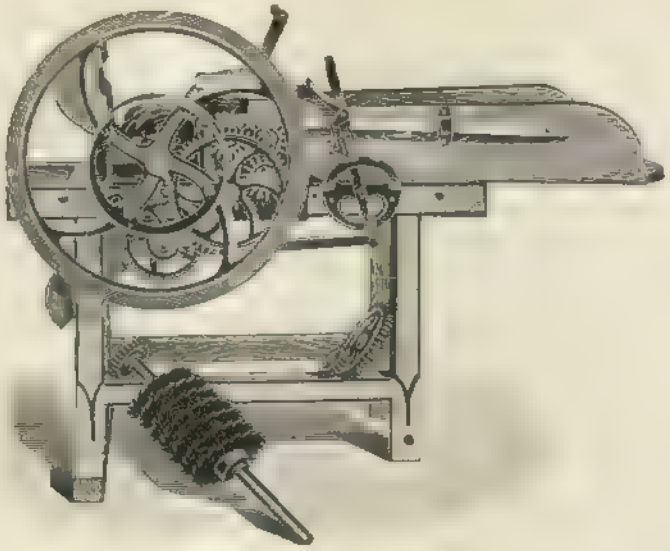


Nos. 8 and 11

These cutters have [illegible] and sprocket wheel step feed, and cut 3/8, 5/8, 7/8 and 1 1/8 in.

*No. 8. One 8 in. knife, weight 160 lbs. each $18 00
*No. 11. One 11 in. knife, weight 190 lbs. each 22 00

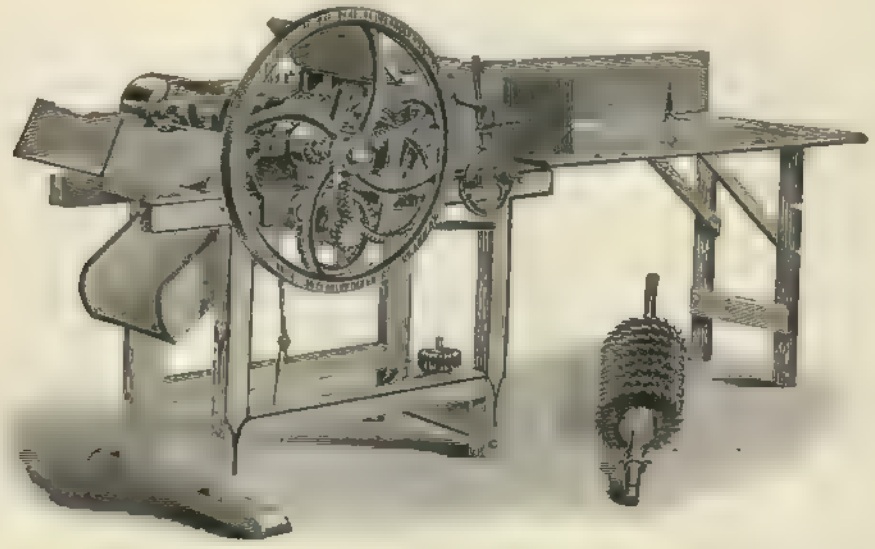
EAGLE, HAND OR POWER



[illegible] has two heavy 11 in. knives and heavy balance wheel. Cuts 1/2, 3/4 and 1 1/2 in. lengths.

*No. 12 1/2. Weight 275 lbs. each..... $32.00
Furnished with a 12 in. clamp pulley with a 4 in. face.

EAGLE POWER CUTTERS



This illustration represents Nos. 13, 15 and 20 which differ only in size.

*No. 13. Has two 13 in. knives, cuts 3/8, 1/2, 3/4 and 1 1/2 in. lengths, speed required 350 to 500 revolutions per minute, capacity 2 to 3 tons of green fodder per hour, has 8 in. pulley with 6 in. face, safety fly wheel and gear controlled by lever .....each, $40.00

*No. 15. Has two 15 in. knives, cuts 3/8, 1/2, 3/4 and 1 1/2 in., machine similar to No. 13 but is larger and stronger, capacity 3 to 4 tons of green fodder per hour .....each, 50.00

*No. 20. Has two 20 in. knives with heavy shaft, safety fly wheel, cuts 3/8, 1/2, 3/4 and 1 1/2 in., capacity 8 to 10 tons of green fodder per hour, revolution required 400 to 500 per minute, has 8 in. pulley with 6 in. face.....each, 75 00

*Not carried in stock, but shipped direct from factory, Lancaster, Ohio.

CORN PLANTERS

EAGLE ROTARY

Eagle

BUCKEYE ROTARY

Buckeye

VICTOR

Eagle rotary drop, steel blades, bolted handles. . . . . per dozen, $18.00
Buckeye rotary drop, steel blades, bolted handles . . . . per dozen, 15.00

These planters have four feed cups at all times exposed to the corn and thus insure perfect regularity in dropping

Victor Corn Planters.....per dozen, $12.00

AMERICAN STANDARD

One Hand

Two Hand

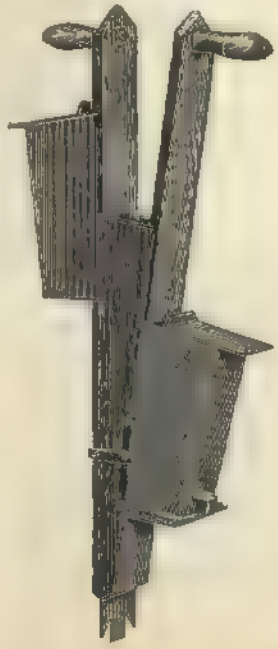
Automatic

No. 3. One Hand, automatic, per dozen . . $21.00
No. 3. Two Hand, automatic, per dozen . . . 20.00

Operates as fast as one can walk.

Adapted especially for a light seeder, but has capacity of from two to seven kernels, as desired, of common dent corn.

EMPIRE FERTILIZER PLANTER



Empire Corn Planter, with fertilizer attachment for dropping fertilizer with the corn, per dozen..... $

TOBACCO SHEARS

NAGLEY'S

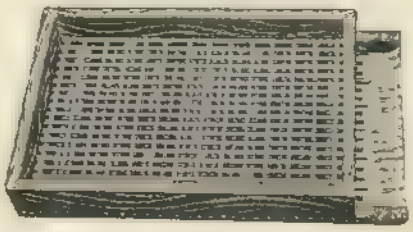
Nagley's new improved tobacco shears, per dozen.. ..$20.00
Nagley's reversible tobacco shears, per dozen. .. . 22 00

These shears are forged from best steel and weigh only 4 lbs. In operating the plant is laid in any direction desired, without breaking the leaves, by raising the handle opposite the way you wish the plant to fall. The cutting of plant is done at the same time.

TOBACCO SPUDS

Black's, tobacco spud or spear, steel, painted green, polished points, per dozen.....$5.00
No. 50. Tin, with steel points, per dozen..... 2 00
No. 60. Tin, with steel points, per dozen.. . . 2 00

CORN GRADERS



Perfection "4 grade" corn grader, sorts out in a single operation the small, odd shaped and imperfect kernels, leaving the even sized perfect kernels, per dozen ..... .$

SEED SOWERS

Cyclone seed sowers, per dozen.. . . .. . $18 00

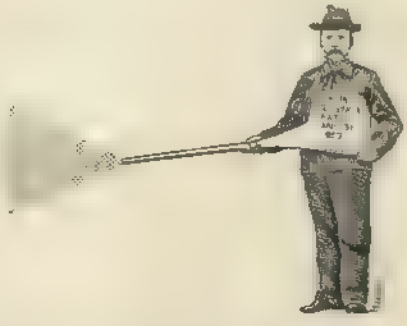
Sows all kinds of grain and grass seed. Has a patented inter-lock, double flange, non-solder tin distributing wheel and an automatic feed adjustment, so that the seed can be let on or shut off instantly. The frame parts are well made of good materials. The machine is nicely painted and has a large duck hopper.

CHAMPION JR. SEEDER

Champion Jr. seeder, per dozen.....$15.00

This is a low price bow seeder, operated with a steel bow through a swivel guide.

THE LIGHTNING SEED SOWER

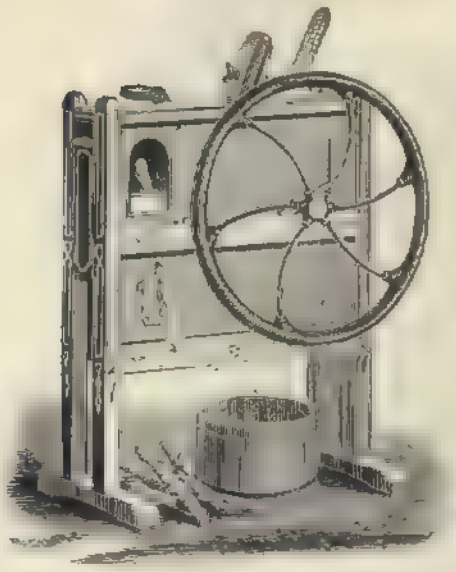


Horn Seeders, per dozen.....$.....

Has a large canvas bag with strap to go over shoulder, tin tube in three sections and of a graduating diameter. Length, 22 in. The larger end fits into a stub joint, which is fastened to the bag and in which is a gauge to regulate to seed. Weight per dozen, 9 lbs.

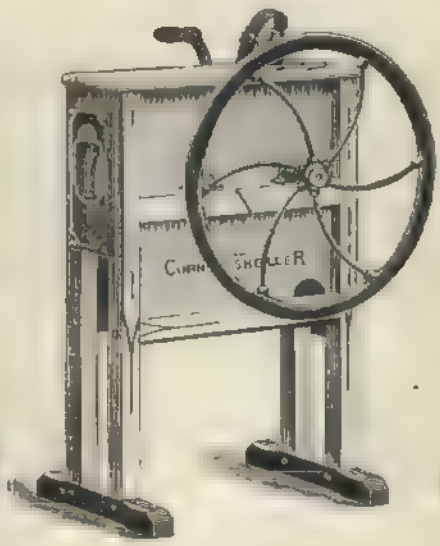
CORN SHELLERS

EAGLE ONE HOLE



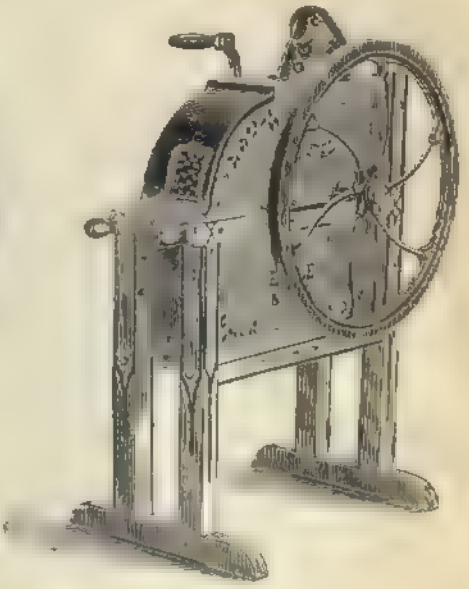
No. 1

EAGLE ONE HOLE



No. 2

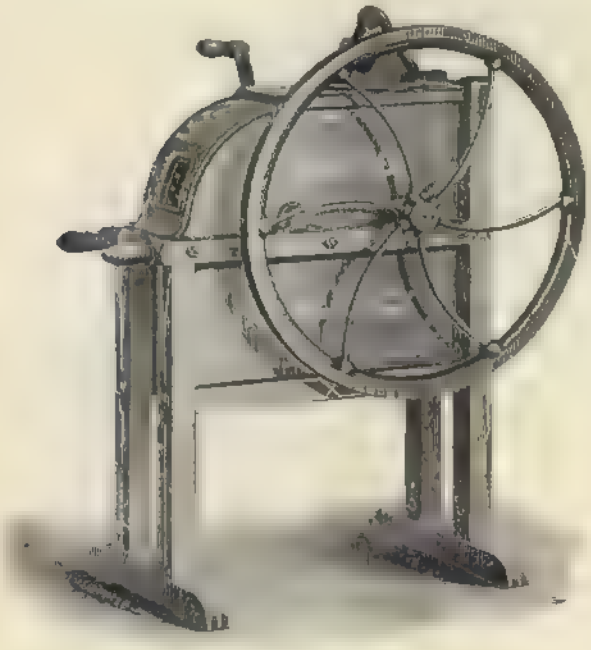
IMPROVED EAGLE



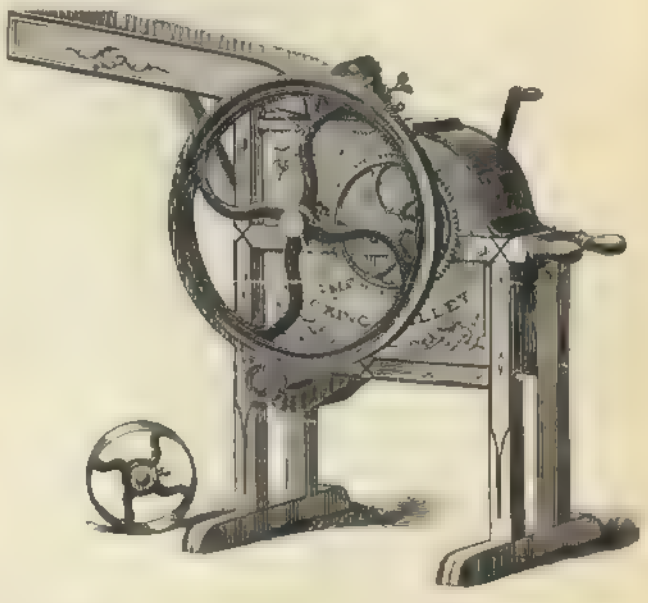
No. 3

No. 1. Eagle one hole with side delivery . . . . . each $10 00
No. 2. Eagle, one hole, with end delivery . . . . . each 10 00
No. 3. Eagle, one hole, a perfect sheller and separator . . . . . each 10 00

HOCKING VALLEY ONE HOLE



HOCKING VALLEY TWO HOLE



Hocking Valley one hole, without fan . . . . . each $10 00
Fan Attachment extra, each 1 50
Feed Table extra, each 50

Capacity 20 to 25 bushels per hour.

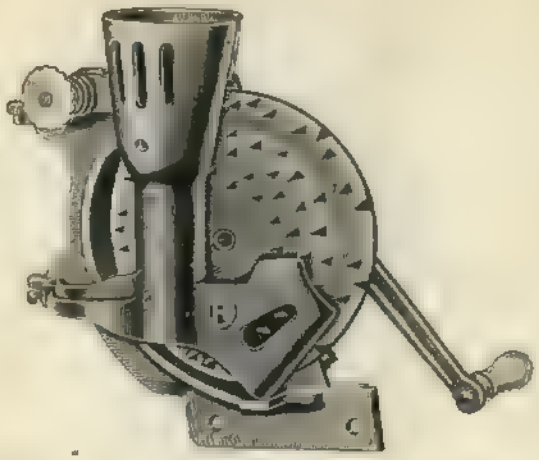
Hocking Valley two hole, with crank fan feed table and pulley, each $25 00

This sheller can be used either by hand or with power.

Capacity 35 to 40 bushels per hour.

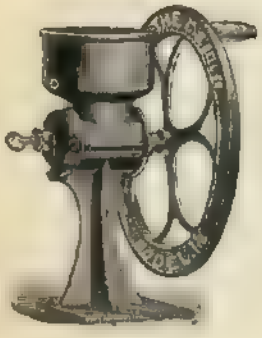
CORN SHELLERS

LITTLE GIANT

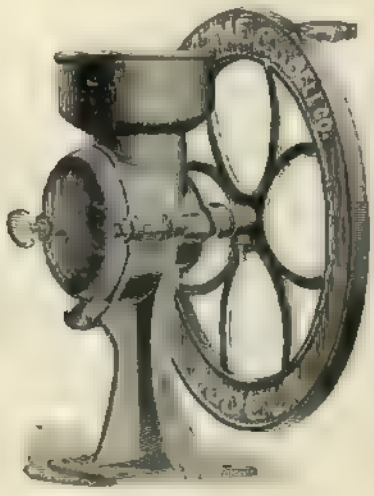


Little Giant Corn Sheller capacity 8 bushels per hour, per dozer $13.00

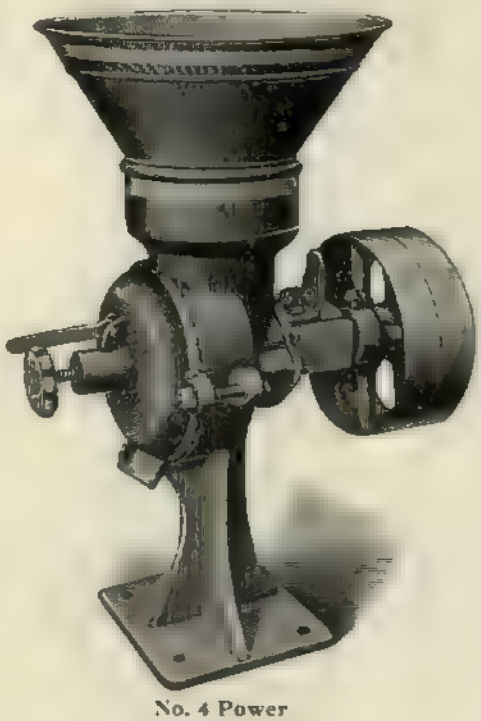
GRINDING MILLS



No. 1



Nos. 2 and 3



No. 4 Power

Nos. 1, 2 and 3 are hand power grinding mills to grind all kinds of grain, dry bones, shells, roots, bark, salt, etc. Adjusted to grind fine or coarse without the use of w[illegible] Burrs [illegible]

Number	Height Inches	Width Inches	Wheel Inches	Weight		Capacity Bushels	Each
				Gross	Net		
1	13	8¼	12½	[illegible] lbs	[illegible] lbs	[illegible]	$2.50
2	16	9½	16½	50 lbs	35 lbs	1 to 2	$ 4.00
3	18½	12¼	19¾	85 lbs	63 lbs	1 to 3	[illegible]

Power Mill

[illegible]ll thrust bearing, adjustable [illegible]d plate, right and left hose pulleys, bars of steel a[illegible] metal, weight [illegible] one or two horse-power P[illegible] corn meal or graham flour, cracking and [illegible]ose grinding at will

Number	Height Inches	Pulleys Inches	Weight		Speed	Capaci	Each
			Gross	Net			
4	18½	8 x 1¾	85 lbs.	65 lbs.	400 to 800	4 to 8 bu.	$12.50

One in a box

OUR reputation as the largest producers of lamps in the world is sustained by every lamp leaving our factory.

EDMUNDS & JONES MFG. CO.
DETROIT, MICH.

Buckeye Jacks

In all sizes

Suitable for any size and style Automobile made. For cars weighing from 500 to 8000 pounds. The largest variety of sizes made by any jack manufacturing company in America.

SCHEDULE

No.	Capacity	Height Bar Down	Raise of Bar	Height Bar Up	Weight	List Price
000	1 Ton	11½″	6½″	18″	5½ lbs	$3.00
00	1500 lbs.	10″	6″	16″	4½ "	$3.00
0	1 Ton	12″	6″	18″	9 "	$5.00
01	1 "	8⅜″	5″	13⅜″	8½ "	$4.50
01	1 "	9¼″	5″	14¼″	8½ "	$4.50
03	1800 lbs.	10″	6″	16″	5 "	$3.50
04	1 Ton	10¼″	7″	17¼″	8 "	$4.50
06	1 "	11½″	7½″	19″	9 "	$5.00

THE BUCKEYE JACK MFG. CO.
ALLIANCE, OHIO

Heinze Spark Plugs

MICA—PORCELAIN

ONE-HALF INCH MICA PLUG

Will not soot.
Assures fixed distance between sparking points.
Mica used free from metallic oxides.
Porcelains made of the best imported clay.
All the standard sizes.

HEINZE ELECTRIC COMPANY
Lowell, Massachusetts

BLUE RIBBON

METAL POLISH

The original Cream Metal Polish. The most popular polish in the world. Used by 75% of the half million car owners of the United States. WHY? Try it.

THE POLISH WITHOUT SEDIMENT
THE POLISH THAT LASTS
THE POLISH THAT SHINES ALWAYS

USE BLUE RIBBON AUTO BODY GLOSS

A perfect running mate for blue ribbon metal polish. They keep your car looking right.

INTERNATIONAL METAL POLISH CO.
2143 N. CAPITOL AVE. :: INDIANAPOLIS, INDIANA

ELECTRIC FAN MOTORS

Very desirable for cooling the air in Bed Rooms, Sick Rooms, Offices, etc.; Purifying as well as Ventilating. For the Storekeeper whose show windows are hidden all winter by frost an Electric Fan will be a great benefit

BRACKET OR DESK FANS

DESK FAN

BRACKET FAN

Frames are so constructed that the Fan can be set at any desired angle and the air current sent in any direction. This also permits of its use either as a Desk or a Bracket Fan. Simple in construction, Neat and Attractive in appearance and operate at low cost; the 12 in. Fan consumes less current than one ordinary 16 Candle Power Incandescent Lamp and the 16 in. Fan less than two 16 Candle Power Incandescent Lamps. Motor is of the Automatic, Wick Oiling Type; has two Bearings, and runs practically Noiseless, the Fan, Guard and Oil Cup Nuts are Polished and Lacquered Brass, Cast Iron Frame, Black Enamel Finish; Three Speeds are obtainable—approximately 1000, 1300 and 1650 Revolutions per minute; Complete with Switch

ALTERNATING CURRENT FANS, 60 CYCLES

Equipped with Standard Motors of the Single Phase Induction Type having Split Phase Windings and Squirrel Cage Rotor, which has proven very satisfactory for this class of service

	Each
No. 60677—100 to 110 Volts, Diameter 12 in.	$26.00
No. 60679—100 to 110 Volts, Diameter 16 in.	31.50
No. 60678—200 to 230 Volts, Diameter 12 in.	28.00

Average Shipping Weight, 40 Lbs. Each

DIRECT CURENT FANS

These Fans are Series Wound and are equipped with a suitable resistance for Speed Control; the commutators are completely enclosed and great care is taken to prevent wearing, sparking, etc.; Carbon Brushes prevent cutting of commutator

	Each
No. 60673—100 to 115 Volts, Diameter 12 In.	$24.00
No. 60675—100 to 115 Volts, Diameter 16 In.	28.00

Average Shipping Weight, 40 Lbs. Each

We can furnish on Special Order the above Fans with Drawn Steel Frame, Black Enamel Finish at an advance of $1.00 list.

EIGHT-INCH DESK AND BRACKET FANS

Small Size Fan for Desk and Telephone Booth Purposes; Diameter of Fan 8 in., Drawn Brass Frame

ALTERNATING CURRENT FANS
100 to 125 Volts, 60 Cycles

	Each
No. 98926-A—Black Oxide Finished Base, Polished Brass Blades and Guards	$16.00
No. 108446-A—Mottled Copper Finished Base, Polished Copper Blades and Guards	18.00
No. 108448-A—Brushed Brass Finished Base, Blades and Guards	17.00

Weight 14 Lbs. Each

DIRECT CURRENT FANS
100 to 125 Volts

	Each
No. 98927-A—Black Oxide Finished Base, Polished Brass Blades and Guards	$15.00
No. 108449-A—Mottled Copper Finished Base, Polished Brass Blades and Guards	17.00
No. 108451-A—Brushed Brass Finished Base Blades and Guards	16.00

Weight 14 Lbs. Each

OSCILLATING FANS

FOR 60 CYCLE, ALTERNATING CURRENT CIRCUITS, 2 SPEEDS, 100 TO 110 VOLTS

The Oscillating Type Fan Motors are particularly adapted for use in places where it is desired to produce a thorough circulation of air. The Oscillating Device merely consists of a few Auxiliary Parts which are used in connection with slightly modified 12 and 16 inch Desk Fan Motors. Fan Guard and Oil Cup Nuts are Polished and Lacquered Brass, Cast Iron Frame, Black Enamel Finish.

AIR OPERATED OSCILLATING FAN MOTORS

	Each
No. 115675-A—Diameter 12 in.	$33.50
No. 115676-A—Diameter 16 in.	40.00

Average Shipping Weight 40 Lbs. Each

MECHANICALLY OPERATED OSCILLATING FAN MOTORS

	Each
No. 149178—Diameter 12 in.	$33.50
No. 149180—Diameter 16 in.	40.00

Average Shipping Weight 45 Lbs. Each

We can furnish the above fans on Special Order with Drawn Steel Frame, Black Enamel Finish at an advance of $1.00 list

CEILING FANS

Cut shows Alternating Current

With the Mottled Copper Finish Ceiling Fan Motors are furnished a 3 foot stem of Iron Conduit and a corresponding length of Rope Design Brass Stem Casing finished in Mottled Copper, together with an Insulating Hanger, a Ceiling Hook and Ceiling Canopy. The 3 foot lengths are suitable for 12 foot ceilings. Stems and Stem Casings are not supplied with Black Japan Finish Ceiling Fans, but Black Enamel Canopy, Insulating Hanger and Ceiling Hook are furnished

ALTERNATING CURRENT, FOR 60 CYCLE CIRCUITS, 58 IN., 4 BLADES

May be used on 50 Cycle Circuits

MOTTLED COPPER FINISH

Nos.	Volts	Speeds R. P. M.	Watts at Full Speed	Each
115697-B	100-125	100, 160, 225	150	$53.00
115698-B	200-250	100, 160, 225	150	60.00
BLACK JAPAN FINISH				
115725-B	100-115	160, 225	150	52.50
115726-B	200-230	160, 225	150	54.50

Shipping Weight about 94 Lbs. Each

DIRECT CURRENT, 57 IN., 4 BLADES; MOTTLED COPPER FINISH

Nos.	Volts	Speeds R. P. M.	Watts at Full Speed	Each
61868-A	100-115	100, 150, 200	110	$52.00
61869-A	200-230	100, 150, 200	110	56.00

Shipping Weight 112 Lbs. Each

WESTINGHOUSE WATTHOUR METERS

ALTERNATING CURRENT WATTHOUR METER

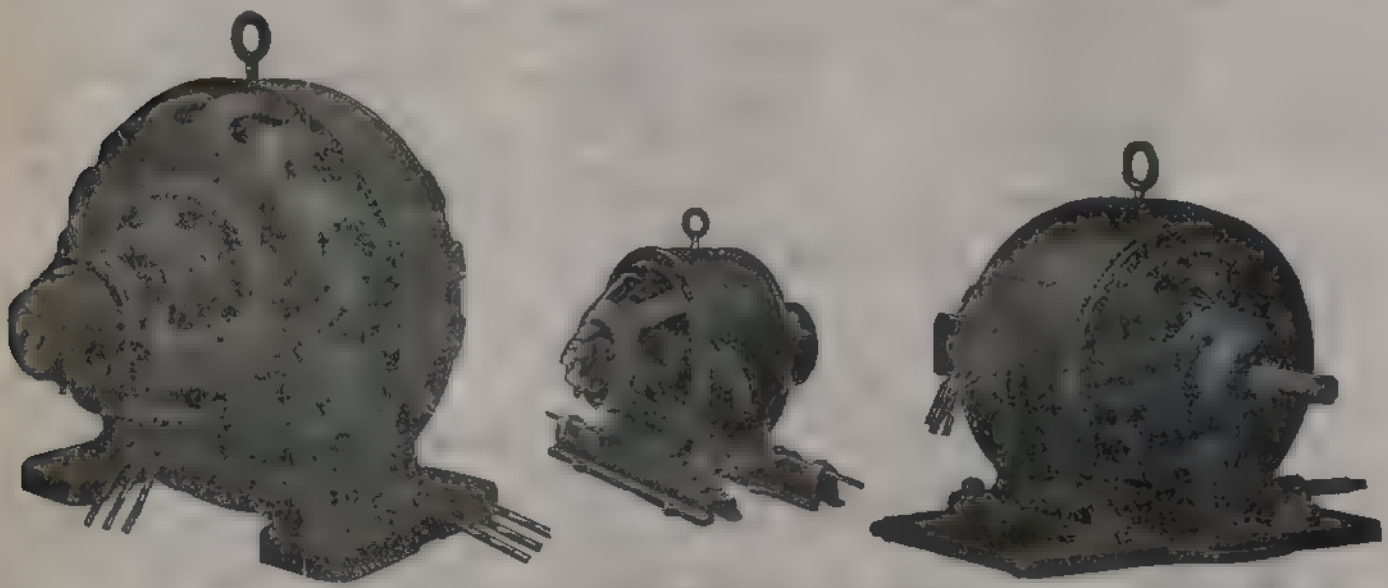
We can furnish on Special Order **Alternating Current, Watthour Meters, Single** and Polyphase, Two and Three Wire for **Voltages** from 50 to 2000, Amperage Capacity from 5 to 800, 25, 60 or 133 Cycles, with Glass or Metal Covers. Prices and Descriptions on application.

DIRECT CURRENT WATTHOUR METERS

We are also in position to furnish on Special Order **Direct Current Watthour Meters**, Two and Three Wire, in **Voltages from 100 to 500, Amperage Capacity 3 to 600. Prices and Descriptions on application.**

Note—In order to quote intelligently on Meters we must know the Voltage as well as Kind of Current—Direct or Alternating—**Amperage Capacity and Number of Wires.**

WESTINGHOUSE MOTORS



ALTERNATING CURRENT INDUCTION MOTORS

Alternating Current Induction Motors are of two general classes depending on the type of rotor winding viz. Squirrel Cage Motors for constant speed service where the starting conditions are not too severe, and Phase Wound Slip Ring Motors for varying speed service and for constant speed service where the motor must start with considerable torque or with great frequency and without disturbing the line voltage so as to affect lamps.

We can furnish on **Special Order Alternating Current Motors, Two and Three Phase,—60 Cycles, 7200 Alterations,—40 Cycles, 4800 Alterations,—25 Cycles, 3000 Alterations, in Voltages from 50 to 2,000, Horse Powers from ½ to 50, and Speed Revolutions per Minute from 690 to 1700. Prices and Descriptions on application.**

DIRECT CURRENT MOTORS

Direct Current Motors are of two general classes—**Shunt Wound** or **Compound Wound.** The **Shunt Wound** run at practically constant speed at all loads and the **Compound Wound** vary in speed with varying load, but start with better torque than a Shunt Wound Motor. Compound Wound Motors should be applied in preference to Shunt Wound Motors where starting conditions are severe and where either the load or voltage fluctuates widely.

Direct Current Motors can be furnished on **Special Order Shunt** and **Compound Wound** in **Voltages from 110 to 650, Horse Powers** from ⅛ to 20 and **Speed Revolutions per Minute from 450 to 2100.** Prices and Descriptions on application

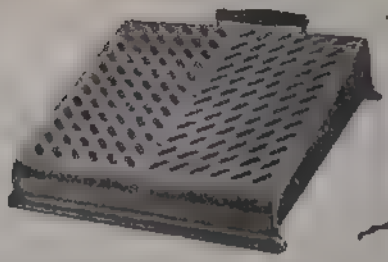
WHAT WE SHOULD KNOW IN ORDER TO RECOMMEND A MOTOR

First—Work to be done or machine to be driven and Horse Power required?
Second Nature of Service—Heavy or Light Continuous or Intermittent—and Starting Conditions?
Third Kind of Current Alternating or Direct? If Alternating Current what is Voltage, Phase and Frequency? If Direct Current what is Voltage and is it steady or varying?

ELECTRIC HEATING APPLIANCES AND SAD IRONS

Will Operate on Direct or Alternating Current

110 Volt carried in stock; 220 Volt can be furnished on Special Order from the factory



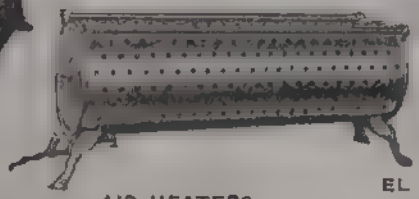
EL WARMO FOOT WARMER

Or Small Room Heater

Each

Invaluable for invalids or old people, when placed under the desk, table or in the bath room it makes the temperature very comfortable; Nickel Plated Finish; Size 10x10½ in.; 250 Watts; Complete with Cord and Plug $6.00

Weight 5 Lbs Each



AIR HEATERS

A compact and durable Electric Radiator for small rooms, offices, etc. Body is made of perforated pressed steel, heavily nickeled; Nickeled cast legs and bar foot rests.

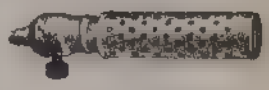
Size In.	Wt. Lbs.	Dimensions, In.	Watts	Each
5	11	8 x19	1000	$8.00
6	12½	8½x21	1500	9.00
7	15	9 x23	2000	10.00

EL STOVO DISC COOKING STOVE

Each

Heats quickly and remains hot a long time; Fibre Tipped legs prevent marring or scratching; lower shelf prevents the reflected heat from doing damage to whatever it is setting upon, Nickel Plated Finish; 6 in. in. Diameter; 250 Watts; Complete with Cord and Plug $5 00

Weight 6 Lbs. Cash



CURLING TONG HEATERS

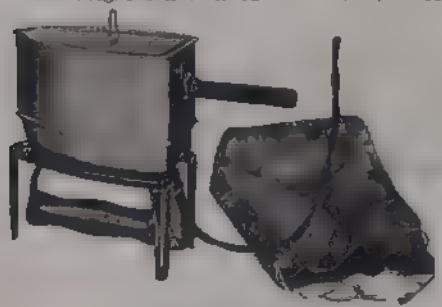
Each

Screws into any lamp socket, either wall fixtures or cord; Spring holds curling tong in place, Nickel Plated Finish; Length 5¾ in., Diameter 1⅛ in., Opening ½ in. .35

Watts $2 50

Weight 9 Oz. Each

SAD IRONS



UTILITY SET

Per Set

Consists of 2½ Lb. Sad Iron, Stand and Water Dish, packed in a dainty ooze leather shopping bag; when iron is inverted and placed in stand it forms a hot plate for heating purposes, there is an opening in iron to heat curling irons without extra current; Nickel Plated Finish; 330 Watts; Complete with Cord and Plug $6.00

Weight 3⅛ Lbs. per Set

STANDARD HOT POINT IRONS

Comprises all the latest improvements in Sad Irons; Heating Element is evenly distributed over bottom of Iron where heat is concentrated; An attached Stand saves all lifting—just tip it on end when not in use; This iron is furnished in three sizes and two finishes—Polished and Matt or Dull Nickel Finish, the 6 Lb. is the best household size; Complete with Cord and Plug.

Size Lbs., Each	3	5	6
Watts	330	500	575
Polished, Each	$4.50	5.00	5.00
Matt or Dull Nickel, Ea.	4.50	4.50	

LAUNDRY IRONS

Especially adapted for laundry work; Same as Standard Hot Point Iron except larger in size and does not have the attached stand; Complete with Cord and Plug.

+Size, Lbs. Each	7½	8½	10
Watts	700	750	800
Each	$6 00	6.50	7.00
+Size, Lbs., Each	12		15
Watts	850		900
Each	$8 00		9.00

TAILOR'S GOOSE

Built with two parallel heating elements, giving an even flow of heat; Can furnish in either Single Heat or Three Heat; Three Heat Goose gives the operator complete control of the temperature at all times; and is extremely economical; Three Heat feature can be applied for voltages from 100 to 125. Higher voltages for Single Heat only; Complete with Cord and Plug.

Weight Lbs.	Single Heat Size In.	Watts.	Each
+15	3x10¼	350	$11.00
+20	3¼x10½	900	12.00
+25	4x12	1000	13.00

Three Heat can be furnished at an additional list of $2.00

JUMBO IRONS

Designed to handle large flat work; Full V shape same as other lighter laundry irons; furnished complete with Roller Stand and Board, 8 ft. extra heavy Cord, two Switch Plugs, and Suspension Spring

Weight Lbs.	Single Heat Size In.	Watts.	Each
+25	7x11	1400	$18.50
+30	7½x12	1500	19.50

Can furnish in Three Heat at an additional list of $2.00

POLISHING IRONS

POLISHING IRONS

These irons are especially desirable for producing a polished surface. Equipped with 8 ft. extra heavy Cord, two Switch Plugs and Suspension Spring.

Diamond Face Weight Lbs.	Size In.	Watts.	Each	Morocco Face Weight Lbs.	Size In.	Watts.	Each
+4	2⅜x4½	400	$6.50	+6	3⅛x5¼	600	$7.00
+5	2¾x5	500	7.00	+7	3½x5¼	700	7.50

+Not Carried in Stock; Sold only for Direct Shipment from Factory

All Hot Point Irons guaranteed for Five Years against mechanical defects

ELECTRIC SOLDERING IRONS

The heating unit in these Soldering Tools is hermetically sealed so flux fumes cannot destroy it. The peculiar and patented construction forces all the heat to the tip. The tip is made of pure copper, hand forged and tinned. The one piece handle unscrews and slides back on the cord exposing the very convenient terminals. Each tool has a six foot cord and a separable Edison base plug. The tips screw in and are easily replaced when worn out.

Each

No. 100—Equal to 1½ Lb. per Pair Soldering Copper; Length 13¾ in. Tip ⅛ in. in Diameter; 70 Watts; For Telephone Switchboards, Electrical Instruments and very light manufacturing $6 00

Weight 12 Oz. Each

No. 1—Extra Tips for above Irons..... .30

Each

No. 400—Equal to 6 Lb. per pair Soldering Copper; Length 14¾ in.; Tip 1⅝ in. in Diameter; 350 Watts; For heavy Tinware, Sheet Steel work, Metal Boat making and Refrigerator work $12 00

Weight 46 Oz. Each

No. 4—Extra Tips for above Irons..... 1.00

Each

No. 700—Equal to 1½ Lb. per pair Soldering Copper; Length 10 in.; Tip ½ in. in Diameter; 60 Watts; For bench and open work where light short tip is wanted; Specially adapted for telephone inspectors' or lineman's tool kit.....$5 50

Weight 9 Oz. Each

No. 7—Extra Tips for above Irons..... .25

Each

No. 200—Equal to 3 Lb. per pair Soldering Copper, Length 14⅛ in.; Tip ⅞ in. in Diameter; 150 Watts; For fast Telephone Work, Light Tinware, Automobile Repairs and general home use $8 00

Weight 18 Oz. Each

No. 2—Extra Tips for above Irons..... .50

Each

No. 500—Equal to 2 Lb. per pair Soldering Copper; Length 11⅝ in.; Tip ⅞ in. in Diameter; 120 Watts; For about the same work as No. 200 but recommended when shortness is important $7.00

Weight 16 Oz. Each

No. 5—Extra Tips for above Irons.... .40

Each

No. 800—Equal to 10 Lb. per pair Soldering Copper; Length 15⅞ in.; Tip 1¾ in. in Diameter; 500 Watts; For heavy Sheet Steel and Copper Cornice work and large Metal Patterns $16.50

Weight 65 Oz. Each

No. 8—Extra Tips for above Irons..... 3.00

Each

No. 300—Equal to 4½ Lb. per pair Soldering Copper, Length 14⅝ in., Tip 1⅛ in. in Diameter; 250 Watts; For medium Tinware, general manufacturing, Metal Patterns, and heavy Automobile Work $10.00

Weight 29 Oz. Each

No. 3—Extra Tips for above Irons . .75

Each

No. 600—Equal to 1 Lb. per pair Soldering Copper; Length 13¾ in.; Tip ⅞ in. in Diameter; 55 Watts; For extremely light soldering, light Telephone Multiple Switchboard Repairs, Electrical Instruments and the smallest fuses $5 00

Weight 9 Oz. Each

No. 6—Extra Tips for above Irons..... .25

ELECTROCURL OR ELECTRIC CURLING IRONS

Each

No. 10—Operates on any Voltage from 104 to 125, either Alternating or Direct Current; Will not burn or scorch and will not discolor white hair; Length 11⅝ in $5 00

Weight 14 Oz. Each

SEWING MACHINE MOTORS

Connection made with any Electric Light Fixture; Can be used on any style of Sewing Machine, either Drop Head or Stationary Head; Height Over-all 7 inches.

The Operator has perfect control of the machine at all times; Pressing a Button or turning a small Switch starts the Motor; a slight pressure on the Treadle starts the Machine and the speed depends entirely on the pressure applied. The Motor and Belt are so placed that they cannot injure the cloth and all parts of the Motor and the Wires leading to it are covered and protected so that an electric shock is impossible; the Motor is easily attached to any Sewing Machine; all necessary Attaching Devices, including a new Belt and full instructions for operating the Machine are furnished with each Motor; **the cost for operating continuously for 10 hours is about five cents, or one-half cent per hour;** on Drop Head Machines the Motor can be readily swung to One Side to permit closing.

Note—Be Sure you are right about the Current; Specify clearly whether Alternating or Direct Current is wanted and what Voltage.

Each

No. 20—For Alternating Current.....$32.00

No. 30—For Direct Current..... 29.00

One in a Box; Weight 19 Lbs. Each

NECESSARY ATTACHMENTS Per Set

No. 40—Plug, Switch and Cord for above.....$1.50

GASOLINE BLOW TORCHES

For Telephone and Telegraph Use

This style of Torch does not need a Pump to generate the Air Pressure, but depends upon heat to do this. A practical Torch of small size which will do as much work as a large one. Starts with a match, is entirely automatic, and burns two hours at one filling. Produces a perfect Bunsen flame of over 2000 degrees Fahrenheit. The Corrugated Neck largely increases the heating surface and creates a greater pressure than could otherwise be produced. Perfectly safe and cannot get out of order. Adapted for any purpose where quick, cheap, clean and intense heat is desired.

Each

No. 50—Brass Nickel Plated; Capacity 4 Oz., Diameter 3 in., Height of Tank 3 in., Height Over-all 6⅞ in. $2.00

One in a Box Mailable Weight 5 Oz. Each

PORTABLE ELECTRIC LAMPS

Height 21½ in. with 14½ in. open work Metal Shade with Gold Amber or Ruby Amber Green Glass. Fitted complete for Two Bulbs, with Pull Sockets and 6 ft. Silk Cord.

	Each
No. 80-PB—Pompeian Bronze Finish	$16 75

Weight 12⅛ Lbs. Each

Height 21½ in. with 14½ in. open work Metal Shade with Gold Amber or Ruby Amber Green Glass. Fitted complete for Two Bulbs, with Pull Sockets and 6 ft. Silk Cord.

	Each
No. 85-PB—Pompeian Bronze Finish	[illegible]
No. 85-BB—Brushed Brass Finish	15.50

Weight 10½ Lbs. Each

Height 20 in. with 14½ in. Shade with Amber Green Glass. Fitted complete for Two Bulbs, with Pull Chain Sockets, 6 ft. Parallel Cord and Benjamin Plug.

	Each
No. 185-V —Verdigris Finish	$14 75
No. 185-SB—Statuary Bronze Finish	14.75

Weight 10 Lbs. Each

Height 22 in. with 16 in. Shade with Amber Green Glass; Fitted complete for Two Bulbs, with Pull Chain Sockets, 6 ft. Silk Parallel Cord and Benjamin Plug.

	Each
No. 210-PB—Pompeian Bronze Finish	$14 75
No. 210-V —Verdigris Finish	14.75

Weight 11½ Lbs. Each

Note—We can furnish any of above Lamps fitted for Gas, on Special Order at a reduced list of $1.00

PORTABLE ELECTRIC LAMPS

Height 23 in. with 15 in. Shade with **Gold Amber Glass;** Fitted complete for Two Bulbs, with Pull Sockets and 6 ft. Silk Cord.

	Each
No. 110-SB—Statuary Bronze Finish	$14 75
No. 110-VG—Verde Green Finish	14.75

Weight 19¼ Lbs. Each

Height 21 in. with 12 in. Hexagon Shade with **Amber Glass;** Fitted complete with Key Socket and 6 ft. Silk Parallel Cord and Benjamin Plug.

	Each
No. 120-AB—Antique Brass Finish	$8 00
No. 120-BB—Brushed Brass Finish	8.00

Weight 6¼ Lbs. Each

Height 21 in. with 12 in. Square Shade with **Amber Green Glass;** Complete with Key Socket and 6 ft. Silk Parallel Cord and Benjamin Plug.

	Each
No. 105-BB—Brushed Brass Finish	$8 00
No. 105-SB—Statuary Bronze Finish	8.00

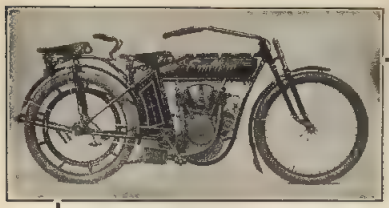
Weight 7 Lbs. Each

Height 22 in. with 12 in. Square Shade with **Amber Green Glass;** Complete with Key Socket and 6 ft. Silk Parallel Cord and Benjamin Plug.

	Each
No. 125-BB—Brushed Brass Finish	$8 00
No. 125-SB—Statuary Bronze Finish	8 00

Weight 7¼ Lbs. Each

Note—We can furnish any of above Lamps fitted for Gas, on Special Order at a reduced list of $1 00



Emblem Sturdiness is an Internationally Known Fact

Here's Another Sample of the Sort of Letters We Receive Every Day:

"In March last I bought one of your 5 H P Emblem Motorcycles for use in my work as manager of the Gowanda District of the Federal Telephone and Telepraph Company. This territory covers the hills of Cataraugus and Chautauqua counties, and between March and October I covered some 6,500 miles. The machine carries me where it would be impossible to make any time with an auto as the roads are hilly and rough, but I have not had the slightest trouble getting over them, my only outlay aside from regular wear of parts, such as tires, etc., being 40 cents for a spring to hold the stand up. I heartily recommend the Emblem for Reliability and Standupness, especially for the hard work done in telephone business. Signed L. W. SHIPMAN, Gowanda, N. Y."

EMBLEM BICYCLES AND MOTORCYCLES "ARE READY FOR GREATER SERVICE TO **YOU.**" Write Today! Why Delay?

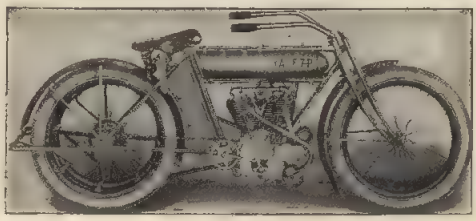
Emblem Manufacturing Company, *Dept. E*

Distributors for California, John T. Hill & Co., Los Angeles. For Oregon, Ballou & Wright Portland. For Washington, F. M. Spinning, Seattle. For the South, Henry Keidel & Co., Baltimore, Md.

Angola, Erie County, New York

YALE Motorcycles YALE

MODELS	PRICES
24	$210
24M	$235
25	$260
27	$285



Twins only furnished with chain or belt drive

THE YALE TEAM AGAIN WON

the N. J. M Club's Decoration Day 24 hour Endurance Contest, riding all night through mud and rain defeating all competitors. They received the Manufacturers' Trophy for team work and the three prizes for individual consistent performance. Another absolute proof of Yale Supremacy.

Agents wanted in open territory. Write today
Orders shipped same day received

CONSOLIDATED MFG. CO. ∴ 1710 Fernwood Ave. TOLEDO, OHIO

We GUARANTEE more miles per gallon

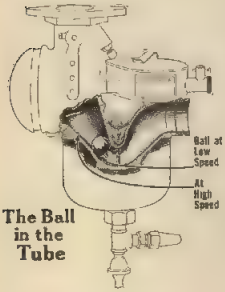
That means MORE POWER and BETTER CONTROL

Fuel economy means perfect mixture—a *constantly* more powerful charge with increased flexibility—quicker pick-up, more power on hills.

We *absolutely guarantee* that the Excelsior Carburetor will produce more miles per gallon than your present carburetor—than any carburetor made.

Test It Out on Your Car

If you are not convinced we will refund the money.



The Ball in the Tube

We know that we can prove our claims. The Excelsior has replaced other carburetors on 75 different makes of cars and has never failed to increase the car's efficiency.

The Excelsior has just two adjustments which are as positive and sure as the combination lock on a safe.

Given the bore and stroke, you simply turn the dials to the numbers given in an arbitrary formula.

High-Speed Dial

You cannot fail, instantly, to secure maximum results.

"The ball in the tube" does the rest. Automatically enriches or impoverishes the mixture according to speed of engine. It is an absolutely perfect automatic adjuster of mixture.

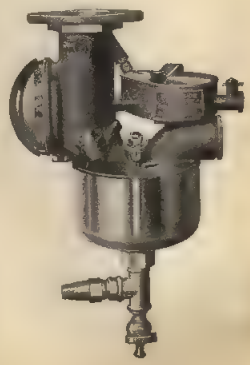
Low-Speed Dial

We have only emphasized two details of the Excelsior—there are many other sterling features in this finest of all carburetors about which you ought to know.

Send for Catalog No. 32.

EXCELSIOR

CARBURETOR



Manufacturers—Owners—

Can you afford to let competing cars, which are no better than yours, consistently beat you out on the hills simply because they are equipped with Excelsiors?

NEW YORK—C. B. Barker & Co., Ltd., 42 West 15th Street
BOSTON—Bi-Motor Equipment Co., 177 Portland Street
CHICAGO—Excelsior Gen'l Supplies Co., 1436 Michigan Avenue
PHILADELPHIA—Mfrs. Supplies Co., Juniper and Cherry Streets

EXCELSIOR NEEDLE COMPANY

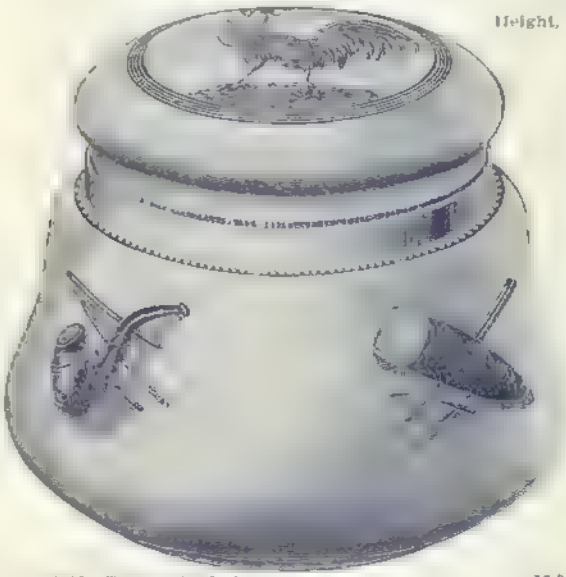
TORRINGTON, CONN.

High Grade Quadruple Silver Plated Cigar and Tobacco Jars

No. R1151 CIGAR JAR $2.75
French Gray Embossed Cover, Fine Crystal Glass Jar.
Height, 5½ inches. Diameter, 4 inches.

No. R681 CIGAR JAR $2.15
Burnished, Embossed Cover, Fine Crystal Glass Jar.
Height, 5⅝ inches. Diameter, 4 inches.

No. R683 CIGAR JAR $2.15
Satin, Bright Cut, Engraved Cover, Fine Crystal Glass Jar.
Height, 5⅝ inches. Diameter, 4 inches.



No. F812 TOBACCO JAR $6.00
Burnished Cover, French Gray Etched Shoulder, Colored Imported Jar (as illustrated).
Height, 5¾ inches.

No. R680 TOBACCO OR CIGAR JAR $5.45
French Gray Embossed Cover, Imported Colored Glass Jar (as illustrated).
Height, 7½ inches. Diameter, 4 inches.

No. F811 TOBACCO JAR $6.20
Burnished Cover, Colored Imported Jar (as illustrated).
Height, 5⅜ inches.

PRICES THE LOWEST
QUALITY THE BEST

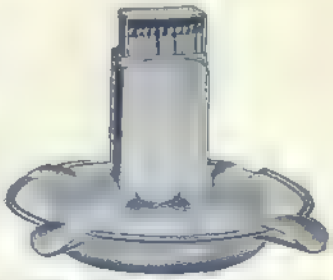
No. W54 CIGAR JAR.....$2.80
Etched Gray and Burnished Cover, Fitted with Sponge Holder. Cut Glass Effect, Colonial Jar. Height, 5¾ inches. Diameter, 3¾ inches.

No. F810 TOBACCO JAR $5.00
Burnished and French Gray Ornamented Cover, Colored Imported Jar (as illustrated). Height 7 inches.

No. F582 CIGAR JAR $5.00
Burnished, Beaded Cover, Fine Crystal Glass Jar. Height, 5½ inches. Diameter 4¾ inches.

HIGH GRADE QUADRUPLE SILVER PLATED SMOKERS' ARTICLES

No. D-1517 ASH TRAY $3.70
Burnished. Height, 1⅜ inches. Length, 4½ inches.



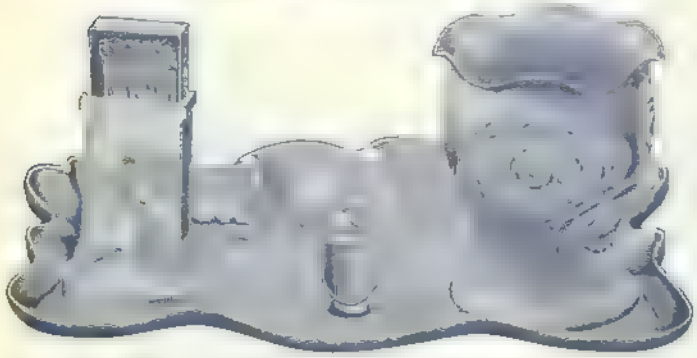
No. S 1525 Match Holder and Ash Tray $2.50
Burnished, gold lined tray with cigar rest. Match holder, 1⅝ inches. Height, 3½ inches.

No. S 1200 Smoker's Lamp and Ash Tray $8.00
Burnished, alcohol vase and burner, ash tray with 4 cigar rests. Height, 8 inches. Diameter, 5⅛ inches.

No. W 45 Smoker's Set $8.70
Burnished trimmings. Match holder, height, 3½ inches. Match receiver, height, 1⅝ inches. Ash tray, height, 1⅝ inches. Length, 9 inches.

WE ARE ALWAYS UP TO DATE, CARRYING THE LATEST AND NEWEST DESIGNS

No. W 50 Smoker's Set $4.70
Burnished trimmings. Ash tray fitted with 4 Cigar Rests and 1 Safety Match Box Holder. Top piece pierced. For cigarettes, burnt matches, etc. Height, 5½ inches. Diameter, 7½ inches.



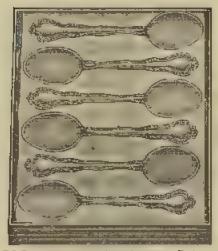
No. D-1545 SMOKING SET, 3 PIECES $9.35
Butler finish, embossed, gold lined Cigar Holder. Height, 3¼ inches. Length of tray 9 inches.

No. W 49 SMOKE SET $9.00
Etched, gray, gold lined. Height of Cigar Holder, 2¾ inches. Diameter of tray, 8½ inches.

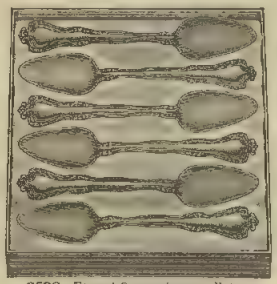
No. W 51 SMOKE SET $5.00
Pierced, burnished, engraved. Set consists of glass lined Cigar Holder, Safety Match Box Holder, 2 Cigar Holders, Ash Tray. Height, 6 inches. Diameter, 4½ inches.

1847 ROGERS BROS. XS TRIPLE

The Faneuil and Tipped Patterns



6596 Faneuil Coffee Spoons, Put up One-half dozen in Lined Box Per set, $1 25



6598 Faneuil Orange Spoons, Put up One-half dozen in Lined box, $4 05 per set.

6597 Faneuil Child's Set, $2 85 per set,

6598 Faneuil Pickle Fork, $1 50 each.

6599 Faneuil Butter Knife and Sugar Shell, $3 50 per set.

Faneuil Pattern.

Prices per dozen.	X S Triple
6600 Teaspoons	$ 6 50
6601 Dessert Spoons	11 00
6602 Table Spoons	13 00
6603 Dessert Forks	11 00
6604 Medium Forks	13 00

Faneuil Pattern.

	X S Quintuple
6605 Tea Spoons	$ 8 55
6606 Dessert Spoons	15 00
6607 Table Spoons	17 70
6608 Dessert Forks	15 00
6609 Medium Forks	17 70

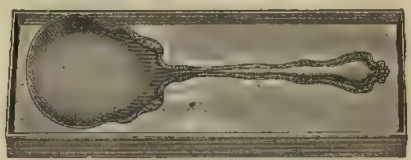
Tipped Pattern.

Price per Dozen.	X S Triple
6610 Tea Spoons	$ 5 75
6611 Dessert Spoons	10 15
6612 Table Spoons	11 50
6613 Dessert Forks	10 15
6614 Medium Forks	11 50

Tipped Pattern

	X S Quintuple
6615 Tea Spoons	$ 8 10
6616 Dessert Spoons	13 50
6617 Table Spoons	16 20
6618 Dessert Forks	13 50
6619 Medium Forks	16 20

6620 Faneuil Cold Meat Fork, in Lined Box, $1 75 each.



6621 Faneuil Berry Spoon, in Lined Box, $2 85 each.

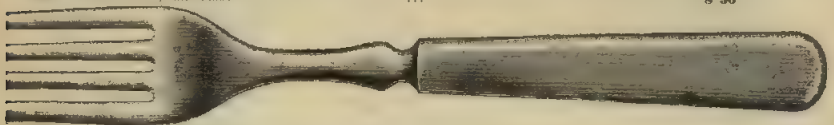
If You Are Uncertain About Any of Our Goods, Write Us. We Will Answer Promptly.

"THE HOUSE OF QUALITY"

1847 ROGERS BROS. XS TRIPLE

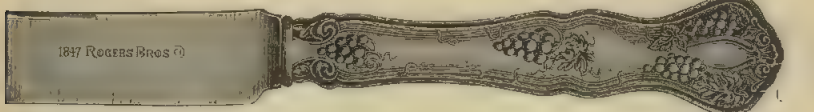
Knives Plated on Fine Steel, Forks on Hard White Nickel Silver.

6622	Medium Knives, Plain Finish	$8 75 per dozen.
6623	Medium Knives, Satin Finish	8 75 "
6624	Dessert Knives, Plain Finish	8 50 "
6625	Dessert Knives, Satin Finish	8 50 "

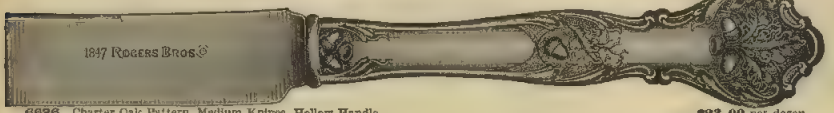


6626	Medium Forks, Plain Finish	$8 75 per dozen.
6627	Medium Forks, Satin Finish	8 75 "
6628	Dessert Forks, Plain Finish	8 50 "
6629	Dessert Forks, Satin Finish	8 50 "

6630	Medium Knives or Forks, Shell Pattern, Plain Finish	$9 00 per dozen
6631	Medium Knives or Forks, Shell Pattern, Satin Finish	9 00 "
6632	Dessert Knives or Forks, Shell Pattern, Plain Finish	8 75 "
6633	Dessert Knives or Forks, Shell Pattern, Satin Finish	8 75 "



6634	Vintage Pattern, Medium Knives, Hollow Handle	$23 00 per dozen
6635	Vintage Pattern, Medium Forks, Hollow Handle	20 50 "



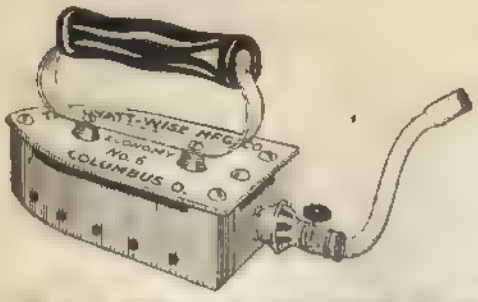
6636	Charter Oak Pattern, Medium Knives, Hollow Handle	$23 00 per dozen
6637	Charter Oak Pattern, Medium Forks, Hollow Handle	20 50 "

6638	Sharon Pattern, Medium Knives, Hollow Handle	$23 00 per dozen
6639	Sharon Pattern, Medium Forks, Hollow Handle	20 50 "

6640	Fruit Knives, Plain Finish Handle	$7 00 per dozen
6641	Fruit Knives, Satin Finish Handle	7 00 "

All Prices Subject to the Regular Discount, Except Those on Diamonds. **Pages 1 to 16.**

GAS IRONS

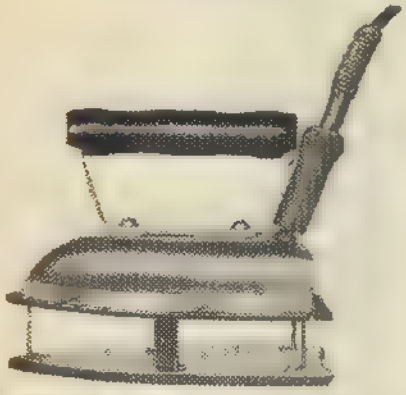


Polished and nickel plated, fits any standard gas burner. Does not throw flame or burn fingers. Economical in use of gas.

Economy Gas Iron, complete with 6 ft. best rubber tubing and adapter, each.....$3.50

ELECTRIC IRONS

THE "FANSTEEL"

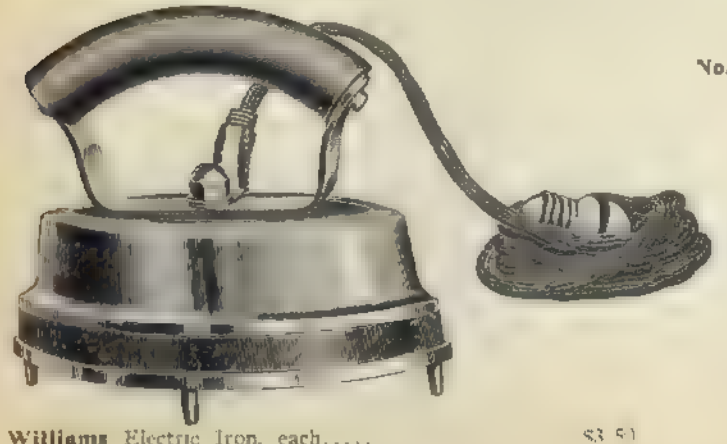


"Fansteel" Electric Iron, each $4.00

Fine ebony finished handle kept cool by two asbestos washers, nickel plated top, rounded point, smooth area, cast core, bottom plate has blue steel finish, highly polished. Detachable cord, strong simple plug, weight 6½ lbs.

One in a box

WILLIAMS



Williams Electric Iron, each..... $3.50

Weight 6½ lbs., double pointed, hardwood handle ebony finish, nickel plated top, bottom plate gun metal finish, cord 7 ft. long. Guaranteed for 5 years.

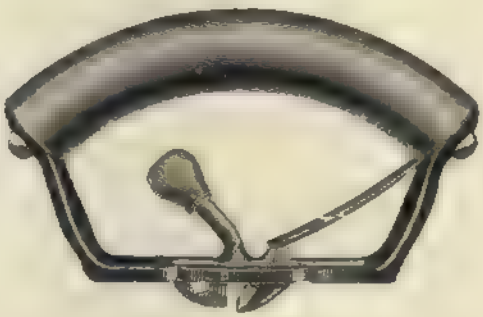
One in a box with stand

TAILORS' GOOSE

Polished, with japanned top, weights 12, 14, 16, 18, 20, 22 and 24 lbs., per pound $

SADIRON HANDLES

No. 501. Mrs. Potts with japanned iron stretcher, per dozen $1.70

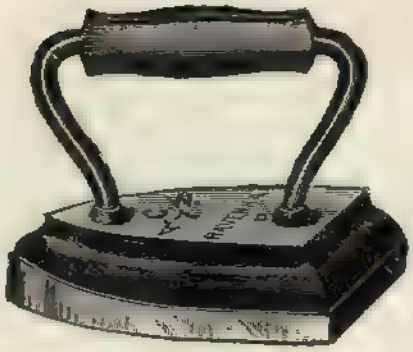


No. 308. With japanned iron stretcher, per dozen.. $1.80

No. 200. "The Best" combination handle with wire side rest, tinned iron stretcher, walnut handle, per dozen $3.00

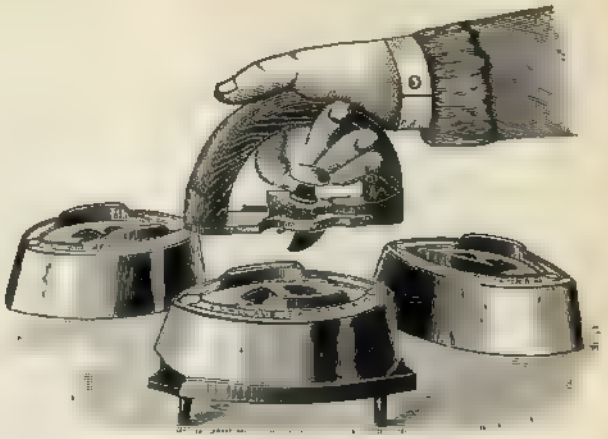
SADIRONS

COMMON



No. 105. Finely polished, japanned tops, 5, 6, 7, 8 and 9 lbs., per pound . . . . . $..
No. 100. Nickel plated, aluminum bronzed tops, 5, 6, 7, 8 and 9 lbs., per pound . . . $

MRS. POTTS



No. 50. Mrs. Potts, nickel plated per set $1 00
Six sets in a box

ASBESTOS SADIRONS

No. 70. Laundry Set consists of hood, two No. 72 oval 7 lb. cores and one No. 73 stand, per dozen. $28 80

No. 100. Laundry Set consists of hood, two No. 72 oval 7 lb. cores, one No. 102 polishing core and stand, per dozen. $31 20
One set in a box, six sets in a case

No. 90. Laundry Set consists of one No. 91 pressed steel iron complete, three No. 92 double pointed cores, weighing with hood 5½ lbs., one steel stand per dozen $15 00
One set in a box, three sets in a case

No. 40

No. 10

No. 40. Sleeve Iron consists of hood, one No. 42 sleeve core and stand, per dozen . . . $8 00
No. 10. Tourist Iron consists of hood, one No. 12 tourist core and stand per dozen . . . 4 00
One in a box, one dozen in a case

No. 50

No. 600

No. 50. Flounce Iron consists of hood and No. 52 flounce core, per dozen $10.00
No. 600. Baby Iron consists of hood and oval core, weight 12 ozs., per dozen. 3 00
One in a box, six in a case

No. 71. Hood fits laundry and pressing cores, per dozen $10 00
No. 41. Sleeve Hood fits sleeve, flounce and small polishing cores, per dozen. 4 00

STUMP PULLERS AND GRUBBERS

FAULTLESS

Pulley

The only Stump Puller that **Winds the Cable Down,** instead of **Up,** on the drum, the Cable, being always low down on the drum, is never too high for horse, to step over, and gives a direct draft from the anchor stump to the one being pulled, affecting a saving of time and power. The **Slack** is taken up by hand, many times quicker than it could be moved by horse power. The material is of the best suitable for the purpose and strong enough to stand all that any team can pull, the **Drum** is large enough to wind the cable rapidly. It is built on one substantial hardwood bed plank, the Drum and Shaft, on which it revolves, being supported by a malleable iron bed casting. **Shaft** extends down through bed, carrying at lower end of steel anchor bar. Wedge at top, by a strong, steel key, and cannot give way under the most severe strains; **Sweep** is of straight grained hardwood, bolted to casting and is always the same distance from ground. Best grade of malleable Iron and Steel as used in the construction of the machine, insuring great strength and long service.

A Special Catalog, fully describing and giving instructions for working the Faultless Stump Puller and Grubber, will be mailed upon application.

ONE HORSE

	Each
No. 1—Diameter Drum 11 in., Length Sweep 12 Feet, giving 52 horse power with One Horse and Pulley; complete with 80 Feet ⅝ in. Faultless Steel Cable, One 8 Foot Anchor Cable, ⅝ in.; One Stump Snare; One Double Power Pulley; Sweep, Lead Pole and Brace, Rope Hooks, Clamps, etc., and One Root Plow; for description of Snare, Pulley and Plow, see below; Weight 950 Lbs. Complete	$110 00
Without Snare, Pulley and Plow, otherwise same as above; Weigh. 865 Lbs. Each	82 75

TWO HORSE

	Each
No. 2—Diameter Drum 13½ in., Length Sweep 12 Feet, giving 85 horse power with Two Horses and One Pulley; Complete with 100 Feet ¾ in. Faultless Steel Cable, One Ten Foot Anchor Cable, ¾ in. One Stump Snare, One Double Power Pulley, Sweep, Lead Pole and Brace, Rope Hooks, Clamps, etc., and One Root Plow; for description of Snare, Pulley and Plow, see below; Weight 1,250 Lbs.	$135 00
Without Snare, Pulley and Plow, otherwise same as above; Weight 1,142 Lbs. Each	104 75

STUMP SNARES

For Hitching around Stump to save Long Cable; Complete with 10 Feet of Faultless Steel Wire Cable, Link Ring, Sleeve Casting, Clamps and Thimbles, made up ready for use

	Each
No. 1S—With ⅝ in. Cable; Weight 25 Lbs. Each	$5 25
No. 2S—With ¾ in. Cable; Weight 28 Lbs. Each	6 25

DOUBLE POWER PULLEYS

By attaching the Hook in end of Pulley Cable, to a tree or stump and running the long Cable through Pulley at an Angle to Stump to be Pulled the Power of Machine is Doubled

Malleable Iron and Steel, Complete with 10 Feet of Faultless Steel Wire Cable, Rope Hook, Clamp and Thimble; made up ready for use.

	Each
No. 1P—With ⅞ in. Cable; Breaking Strain 74,000 Lbs.; Weight 60 Lbs. Each	$12 00
No. 2P—With 1 in. Cable; Breaking Strain 96,000 Lbs.; Weight 80 Lbs. Each	14 00

ROOT PLOWS OR STUMP HOOKS

For Pulling Old Stools, Rotten or Fresh Stumps that have been cut too low to fasten a Snare around, Solid Cast Steel and will not break nor wear out; indispensable in breaking up new ground or cut-over land. Handles make it easily guided or carried without stooping.

	Each
No. 55—With Heavy Pulling Link, Tubular Steel Handles and Steel Braces; Weight 55 Lbs. Each	$10.00

Not Carried in Stock, Shipped Promptly from Factory in Iowa

SMITH

Winds the rope down low; can be set up and anchored ready for work in five minutes; works equally well on hill side or on rough or level ground; the Drum is V Shaped and winds the coils of rope over each other, reducing wear. Warranted free from all defects; to stand the strain and do the work claimed for it and is sold under a positive guarantee to give satisfaction.

Outfit consists of the Complete Machine ready for use except the Crosspole and Sweep, these being cut in the timber where machine is used.

SERIES D

F. O. B. LaCrosse, Wis.	Each
No. 1D—For Hand or One Horse on an 8 ft. Sweep; with 5 ft. Anchor Loop, 45 ft. of ⅝ in. Steel Pull Rope, for Brush and trees up to 6 in.; Weight 150 Lbs.	$17.50
No. 2D—For One or Two Horses on a 12 ft. Sweep; with 6 ft. Anchor Loop, 50 ft. of ¾ in. Steel Pull Rope; for 12 in. Stumps; Weight 275 Lbs.	25.00
No. 3D—For One or Two Horses on a 14 ft. Sweep, with 25 ft. Anchor Rope, 50 ft. of ¾ in. Steel Pull Rope; for 15 in. Stumps; Weight 400 Lbs.	35 00
No. 4D—For One or Two Horses on a 16 ft. Sweep; 25 ft. Anchor Rope, 75 ft. of ¾ in. Steel Pull Rope; for 30 in. Stumps; Weight 500 Lbs.	50 00
No. 11—For One or Two Horses on a 20 ft. Sweep; with 25 ft. Anchor Rope, 75 ft. of ¾ in. Steel Pull Rope; for 48 in. Stumps; Weight 800 Lbs.	67.50

NEW SMITH

For One or Two Horses

F. O. B. LaCrosse, Wis.	Each
No. 2N—Complete with 6 ft. ¾ in. Anchor Loop, 50 ft. ½ in. Pull Rope, and Snatch Block with 8 ft. ¾ in. Hitch Rope, and Take-up for Slack Rope; Guaranteed Breaking Strain, 20 Tons	$48.00
Shipping Weight 400 Lbs. Each	
No. 3N—Complete with Patent 25 ft. ¾ in. Anchor Rope, 50 ft. ⅝ in. Pull Rope and Snatch Block with 25 ft. ¾ in. Hitch Rope, and Take-up for Slack Rope; Guaranteed Breaking Strain 32 Tons	67.50
Shipping Weight 550 Lbs. Each	
No. 4N—Complete with Patent 25 ft. 1 in. Anchor Rope, 50 ft. ¾ in. Pull Rope, Snatch Block with 50 ft. 1 in. Hitch Rope, and Take-up for Slack Rope; Guaranteed Breaking Strain, 44 Tons	90.00
Shipping Weight 725 Lbs. Each	
No. 11N—Complete with Patent 25 ft. 1⅛ in. Anchor Rope, 75 ft. 1 in. Pull Rope, Patent Snatch Block with 25 ft. 1⅛ in. Hitch Rope and Take-up for Slack Rope; Guaranteed Breaking Strain, 60 Tons	110.00
Shipping Weight 900 Lbs. Each	

RAILROAD AND GRADING PLOWS

RAILROAD PLOWS

DORSCH, EIGHT OR TEN HORSE PLOWS

On a Straight Pull, 20 Horses cannot break this Plow

	Each
No. 4—Plow, 11 in. Cut; Weight 285 Lbs.	$50.00
Extra Steel Moldboards; Weight 25 Lbs.	5 00
Extra Cast Iron Landsides; Weight 10 Lbs.	3 00
Forged Steel Shares; Weight 15 Lbs.	6.00

The Share is made of heavy selected Plow Steel, Double Shinned with a Point that has every requisite for wear, is easily welded and sharpened again after becoming dull, by an ordinary blacksmith. No other maker of Plows uses such a heavy quality of steel in the Points, and none have the durability.

Beam is made of steel, of graceful shape, with wide flanges on the top and bottom, from about the top of moldboard to clevis point. Share and Moldboard are of the heaviest and best quality of steel, carefully forged and tempered. Heavy Cast Iron Landside, Oak Handles, plated on Moldboard side. Adjustable Gauge Shoe Furnished in preference to wheel.

DORSCH, FOUR HORSE PLOWS

	Each
No. 2—Plow, 9 in. Cut; Weight 175 Lbs.	$30 00
Extra Steel Moldboards; Weight 20 Lbs.	6.00
Extra Cast Iron Landsides, Weight 8 Lbs	3 00
Forged Steel Shares; Weight 10 Lbs.	5.00

Heavy Selected Plow Steel Share, Double Shinned, easily welded and sharpened; heavy steel Beam with Wide Flanges.

The Handles are made of Oak, 1¼x3 in.; the Moldboard Handle is heavily plated with steel from the bottom to the end of the handle, to prevent wearing when the Plow is turned on the side. Handles braced to the Beam with 1 in. Wrought Pipe, heavy Gauge Wheel, hand forged Clevis.

K AND J, SIX TO EIGHT HORSE PLOWS

This Plow is built to withstand the roughest conditions ever encountered in Contractor Work

The Share and Moldboard are best Plow Steel; the Landside and Point are double shinned; the Beam is Selected Hardwood; heavily ironed from Clevis to Standard; Reversible Cutters; Extra Strong Clevis with two Rings; Malleable Iron Hand Holds.

	Each
No. 101—With 8 ft. Beam. Weight 228 Lbs. Each	$60 00
Extra Landside Points; Weight 39½ Lbs. Each	10 00

K AND J, FOUR TO SIX HORSE PLOWS

Built Similar to the No. 101, but not intended for such Heavy Work

The Share and Moldboard are best Plow Steel, the Landside and Point are Double Shinned; the Beam is Selected Hardwood; heavily ironed from Clevis to Standard, Reversible Cutters; extra strong Clevis with two Rings; Malleable Iron Hand Holds.

	Each
No. 105—With 7½ ft. Beam. Weight 175 Lbs. Each	$45 00
Extra Landside Points; Weight 24 Lbs. Each	8 00

SAMSON

For Heavy Railroad or Township Work; Steel Moldboard, Steel Share, Cast Steel Landside, Steel Coulter, Adjustable Gauge Shoe, Heavy Iron Beam, White Oak Handles Ironed and Braced; Ten Horses cannot break it; a Strong compact light Plow for Rough Usage.

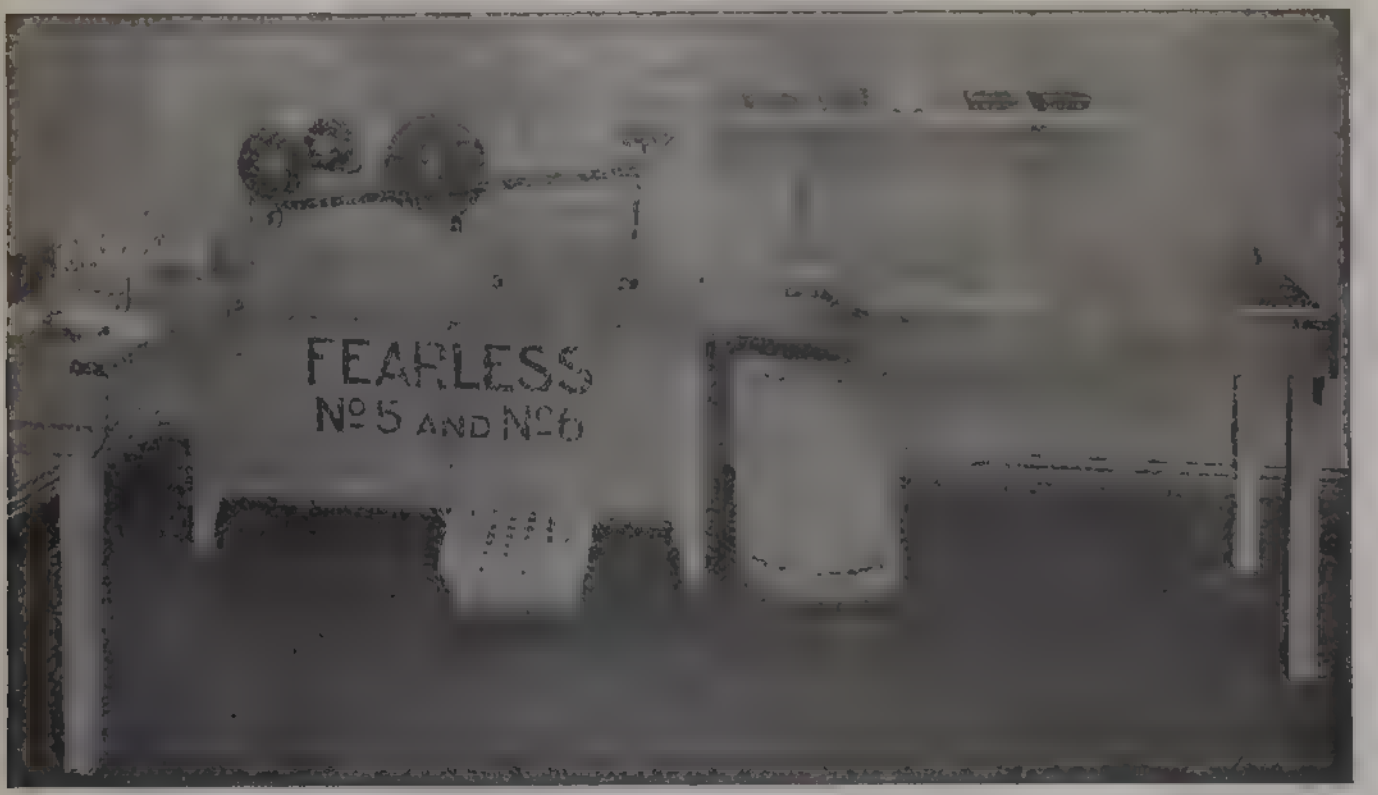
	Each
No. 26—Plow, 12 in. Cut. Weight 195 Lbs	$30 00
Extra Moldboards, Weight 15½ Lbs.	6 50
Extra Landsides Weight 12½ Lbs.	2 35
Extra Shares; Weight 8¾ Lbs	4 50

BULL DOG

For Old Turnpike, Cobblestone and the toughest Hard-pan Work; Adjustable Nose, Steel Share, Cast Steel Landside, Steel Coulter and Gauge Shoe; Iron Beam, Ironed and Braced Oak Handles.

	Each
No. 1—Plow, 12 in. Cut; Weight 201 Lbs.	$32.00

HAND AND POWER DISH WASHING MACHINES



COMBINED ELECTRIC POWER AND HAND

Should the electric current fail, detach the pitman at the balance weight, raise the handle and go ahead by hand. The only machine that can be run either by hand or by power. (Leave off all power attachments except balance weights and you have the No. 5 Hand Machine Below). This machine is liked by users because of the use of only a small fraction of the power needed to operate any other dish washer. A ⅛ horse power Motor furnishes all needed power, in fact it takes less electricity than one 16 C. P. lamp. The baskets containing the dishes move; The dishes do not move. Owing to our having but 30 or 35 revolutions per minute as against 150 to 800 in other makes, the life of our machine is much longer. The only Hand Machine that is worthy the name. The Copper Tank is as near everlasting as it is practical to have anything.

	Each
Nos. 5 and 6—Hand and Power Combined Dish Washer; Tables, Shelf over scraping baock, Scraping Block and Ring; Motor, Balance Weight and piping complete (A straight table or one as shown in illustration below furnished at same price), with No. 1 Galvanized Tank; Weight 800 Lbs.	$250.00
No. 5 and 6C—Complete as above except with No. 1 48 oz. Copper Tank instead of Galvanized; Weight 800 Lbs.	325.00
No. 6—Hand Power Machine Only, without Table or Motor, but with balance weight to insure steady motion, 3 regular baskets included in price. Galvanized Tank; Weight 600 Lbs.	130.00

Fearless Hand Machine Showing Table (Extra)

HAND POWER ONLY

	Each
No 1—Large Fearless with Galvanized Tank, No Tables With 3 Baskets, Weight 300 Lbs.	$125.00
No. 0—Medium Fearless, with Galvanized Tank; No Tables; With 3 Baskets; Weight 275 Lbs	100.00

Machines at above prices are equipped with the necessary valves for heating by steam, artificial or natural gas, or gasoline. If more than one system is wanted add for each system $5.00. Where power is used be sure to state the kind of current, whether direct or alternating. If direct, give voltage; if alternating give Cycle, Phase and Voltage.

DISH WASHING TABLES

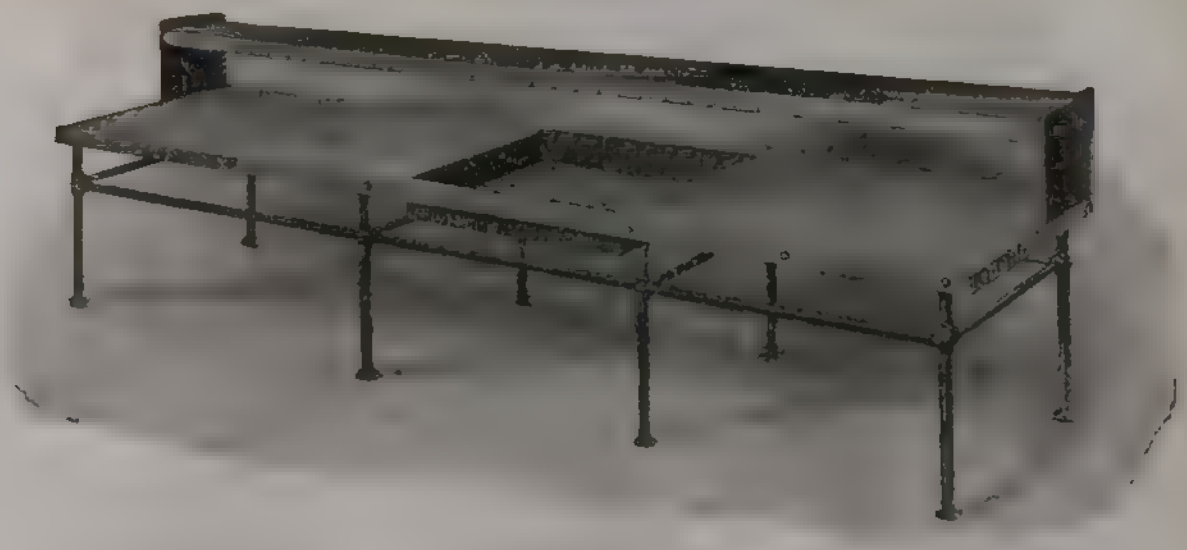
Made of hard Maple, either style shown on this page, or straight.

	Each
No. 10—Without Shelf Weight 300 Lbs. Each	$35.50
No. 10S—With Shelf Weight 325 Lbs Each	40.00

EXTRAS

	Each
Regular Baskets, for Dishes	$2.00
Small Baskets, for Silver	2.50
Platter Baskets	4.50
Scraping Block and Ring	3.50
Rubber Rings for Scraping Blocks	1.50

COOKS' TABLES



Cut Shows Table with Elevated Hot Plate

Top is three inch maple strips glued and bolted together; Has drawers for cooks' use; Stands on 1¼ inch Iron Pipe Legs; Hot Plates made of polished steel; made in length or width, with or without elevated hot plate.

TABLES ONLY, WITHOUT HOT PLATE

	Per Foot
No. 36—36 in. Wide	$6.00
No. 40—40 in. Wide	7.00
No. 48—48 in. Wide	8.00

Weight 50 Lbs. per Foot

BAIN MARIE PANS SET IN COOKS' TABLES

	Copper Each	Galvanized Each
No. 24—24x36 inches, with Steam Coils	$84.00	36.00
No. 30—30x36 inches, with Steam Coils	96.00	42.00
No. 42—30x42 inches, with Steam Coils	108.00	48.00

Elevated Steam Hot Plate Shelf.. .. .. .

FEDERAL ELECTRIC VACUUM CLEANERS

For Household or Professional Vacuum Cleaning; has a Rotary Pump with a positive 9½ in. vacuum at a displacement of 32 cubic ft. of air per minute. The rotary motion being always in the same direction is steady and noiseless. It reduces the wearing on the bearings to a minimum, making the machine last for years. It is of the approved cylindrical form which allows a compact arrangement of the parts. All the metal parts are made of aluminum, which gives great strength and little weight, with the exception of the walls of the cylinder which are of light gauge steel, making it the lightest and strongest machine of its capacity on the market. The dust-bag is large enough to make frequent emptying unnecessary. It is removed by loosening the thumb-screws and taking off the aluminum top or cover. The observation glass at the intake allows the operator to observe conditions of the dust bag as well as showing when all the dust has been removed by the tool; The operation is very simple—to start it insert plug at base of machine, to stop the machine pull out the plug. By connecting the hose fitted with the blower nozzle to the exhaust instead of the intake the machine can be used as a blower when desired.

When ordering be sure to specify voltage and state whether Direct or Alternating Current is to be used and if Alternating how many cycles.

Each

No. C—Federal Vacuum Cleaner with Standard Tool Equipment shown on opposite side of page; Diameter 16 in., Height 25 in.....$135.00

Weight 70 Lbs. Each

STANDARD TOOLS

A complete outfit of all Tools necessary for every requirement of vacuum cleaning is provided with every Federal Vacuum Cleaner. Fifteen feet of vacuum hose and a connecting cord twenty feet long with plug for any standard socket is provided, giving a broad radius of action and making it unnecessary to move the machine in a room of ordinary size. The standard equipment includes all of the following tools except No. 11 Universal Joint, which can be furnished extra.

Nos.
1—8-inch Brush for Hardwood Floors.
2—7-inch Tool for Rugs and Carpets.
3—Fifteen feet Vacuum Hose.
4—Tuft Cleaner for Upholstered Furniture.
5—5-inch Tool for Draperies and Curtains.
6—Blower Nozzle.
7—3-inch Tool for Furniture
8—Curved Handle
9—Wire Brush.
10—Twenty Feet Connecting Cord and Plug.
11—Universal Joint (Special).
12—Library Brush.
13—Straight Handle Extension

SPECIAL TOOLS

In addition to the above standard tools supplied as the equipment of each Federal Vacuum Cleaner, we can furnish the following special tools:

Hard Rubber Blower Nozzle similar to No. 6, for use around switch boards and other electrical devices. This tool will be furnished in place of No. 6 at the option of the purchaser, without extra charge. Standard No. 6 aluminum tool will be furnished unless otherwise specified

Each

No. 11—Universal Joint for changing handle extension to any desired angle can be furnished extra. It will not be substituted for any of the above tools..... $2 50

STATIONARY ELECTRIC VACUUM CLEANERS

STURTEVANT MULTI-STAGE

F. O. B. Readville, Mass.

The Sturtevant Stationary Cleaner produces its suction by rapidly revolving centrifugal fans called multi-stage, there being two or more according to the size of the cleaner. The great advantage of this cleaner over those producing their suction by other mechanical means is that there is nothing to get out of order, no gears, bellows, valves, etc., the only points of contact of any kind are the ball bearings, which last practically a lifetime and need no adjustment. The fan principle of this cleaner gives practically a constant vacuum and does its cleaning by the combination of a large volume of air with as high vacuum as is safe to use with fine carpets. This not only removes dirt but the large volume of air freshens and airs the articles which are being cleaned, keeping carpets, mattresses, curtains, etc., clean and sanitary.

Piping is not furnished with these cleaners, but the tools and wall connections are furnished. In putting in piping care should be taken to avoid all short turns. A smooth pipe should be used. The conduit-type is particularly adaptable, and fittings of the drainage type with recessed ends make a smooth job of piping. The piping in the building should be 2 in. in diameter except in case of exceptionally short piping where 1½ in. pipe might be used. The 2 in pipe, however, is preferable, and in cases where considerable length of pipe is used, or where there are many turns 2½ in. pipe should be used; 2½ in. Standard Pipe Flange connections at Inlet and Discharge Combination Flanges are supplied

Each

Three-Quarter Horse Power Multi-Stage Cleaner with Tools; Size 2x2x3½ ft.; This is designed for use in residences and other small buildings where a stationary cleaner is preferred over a portable one. This size of cleaner will do satisfactory work where frequent cleanings are made and in the small class of buildings where the line of installed pipe and hose are not very long $412.50

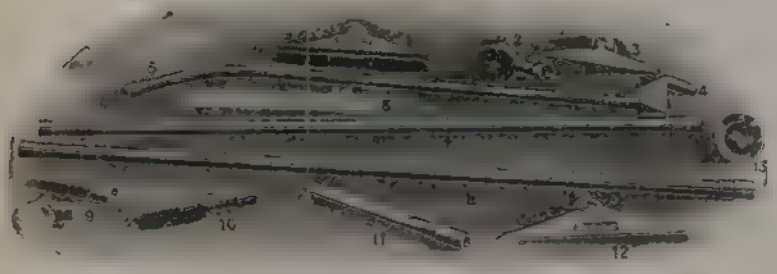
Weight 650 Lbs

Two Horse Power Multi-Stage Cleaner with Tools; Size 2x2x5½ ft.; Designed for use in large size residences, small clubs, apartment houses and public buildings where the piping and hose are of medium length 600.00

Weight 735 Lbs.

Three Horse Power Multi-Stage Cleaner with Tools; Size 2x2x6 ft.; Designed for use in large size hotels, large public buildings, apartment houses, clubs, etc., where, the pipe line and hose are of considerable length and quick work is desired.... 750 00

Weight 955 Lbs.



TOOL EQUIPMENT

Furnished with each Cleaner

No. 1—Brush Tool for use on large wall surfaces

No. 2—Brush Tool with Swing Joint, making possible the easy cleaning of ceilings, small wall spaces, cornices and moldings.

Nos. 3 and 12—Small and Large Floor Tool.

No. 4—Tool for cleaning heavy fabrics, upholstery, etc.

Nos. 5, 7 and 8—Three Sections of Curved and Straight Handle which may be used as desired.

No. 6—Attachment to be used in connection with Floor Tool when cleaning hardwood floors to prevent marring the woodwork.

No. 9—Ends of 25 ft. Rubber Vacuum Hose which is furnished showing the coupling and also the regulating valve which regulates the strength of the vacuum which may be increased or decreased as desired.

No. 10—Brush Tool for cleaning clothes, hats, etc

No. 11—Tool for cleaning books or shelves, interior of pianos, etc.

No. 13—Flat Inlet Valve used on the opening in the piping system

All Tools are finished in Polished Aluminium or heavily Nickel Plated.

What we should know in order to recommend a Stationary Cleaner

When ordering a Stationary Cleaner it is necessary that we become familiar with the conditions under which it must operate. Therefore, we should have the following information in order to avoid delay

In what kind of building is Cleaner to be used?

If a factory, what product is manufactured, and what is the nature of most of the dirt found?

Kind of floors and whether to be carpeted or not?

How many rooms and size, height of ceiling and number of floors?

Approximate size and shape of building (Give sketch if possible)?

Length of piping from cleaner to furthest outlet? If building is already piped state size of piping

Longest length of hose line and number of outlet connections required?

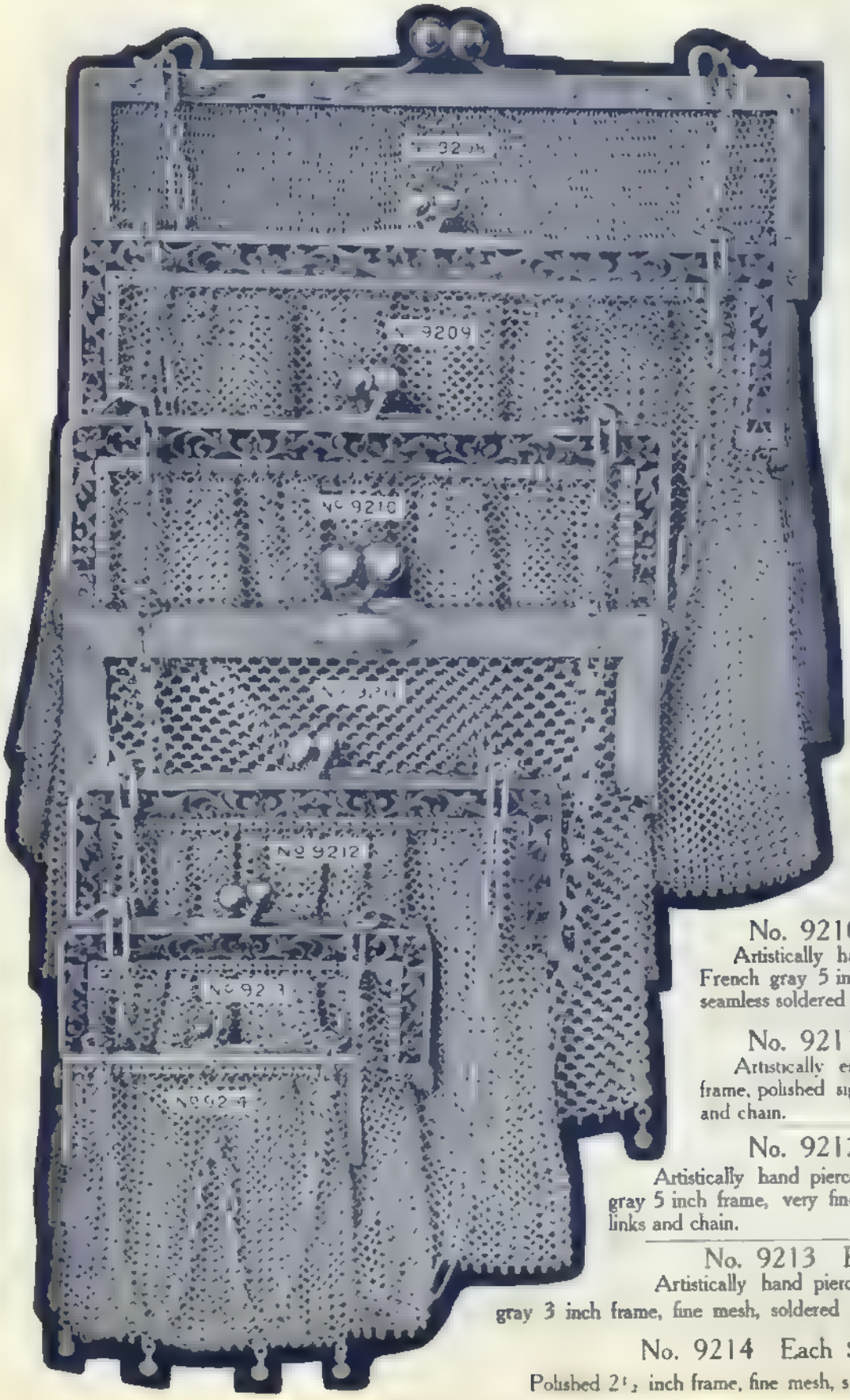
How many sweepers in operation at any one time?

What power is available?

State whether the Electric Current is Direct or Alternating, also give the Voltage, and in the case of alternating current, give the Cycles and Phase.

FINE STERLING SILVER MESH BAGS

GUARANTEED $\frac{925}{1000}$ FINE. Illustrations are Exact Size.



Our hand pierced and engraved patterns, latest styles, fine and extension mesh, are especially commended as quick sellers.

Artistically made, very fine mesh, every link soldered, without seams, and very rich and exquisite in appearance. . . . .

Our prices are surprisingly low when you take into consideration that the numbers quoted and illustrated are of the highest quality and finest grade obtainable.

No. 9208 Each $114.25

Beautifully hand engraved, polished finish 6¼ inch frame, the finest mesh obtainable, seamless soldered links and chain.

No. 9209 Each $101.50

Artistically hand pierced and engraved, French gray 6 inch frame, the finest mesh obtainable, seamless soldered links and chain.

No. 9210 Each $74.75

Artistically hand pierced and engraved, French gray 5 inch frame, very fine mesh, seamless soldered links and chain.

No. 9211 Each $44.00

Artistically engine turned design, 5 inch frame, polished signet center, soldered mesh and chain.

No. 9212 Each $48.00

Artistically hand pierced and engraved, French gray 5 inch frame, very fine mesh, seamless soldered links and chain.

No. 9213 Each $32.00

Artistically hand pierced and engraved, French gray 3 inch frame, fine mesh, soldered links and chain.

No. 9214 Each $13.50

Polished 2½ inch frame, fine mesh, soldered links and chain.

LADIES' FINE LEATHER AND VELVET HAND BAGS

CUTS ARE REDUCED SIZE.

When You Compare Prices, Consider Our Supreme Quality. PRICES EACH

Black goat seal leather, broken bottom shape, tan leather lining, gilt metal frame, fancy ornaments and handle, fitted with purse to match. Size, 11x9 inches.
No. 9196 Each $13.50

Black seal grain leather, gray leather lining, leather covered overlapping frame with protective corners, double strap handle and light [illegible] gilt metal trimmings, accordion bottom and coin purse to match. Size of bag 8¼x11¾ inches.
No. 9197 Each $14.00

Black goat seal leather, tan leather lining, [illegible] bottom shape, fitted with purse, [illegible] and smelling salt bottle. Size, 11½x9 [illegible] inches.
No. 9198 Each $14.00

Genuine horse back seal leather, leather [illegible] fancy [illegible] and handle, gilt [illegible] to match, gilt [illegible] purse to match, [illegible] back bottom. Size of bag 8¾x5 inches.
No. 9199 Each $16.00

Real black seal leather, broken bottom shape, fine black kid lining, leather covered frame with fine gilt lock and side locks with extra strong hand stitched [illegible] with [illegible] metal [illegible] to match.
No. 9200 Each $25.00

Genuine cornback alligator leather tan leather lining, leather covered frame, with gilt lock and extra side lock, fitted with purse to match. Size, 14x8¾ inches.
No. 9201 Each $28.00

Black goat seal leather with pull in center sack, long German silver French gray finish frame, extra long leather handle, fitted with purse to match. Size 8x7 inches.
No. 9202 Each $8.00

[illegible] goat seal leather, broken bottom shape, [illegible] lining, French gray finish [illegible] braid with leather, extra long [illegible] fitted with purse to match. [illegible]
..... $9.00

Real black seal leather, broken bottom [illegible] lining, with fine French gray finish German silver frame, extra long braided leather handle, with silk tassels fitted with purse to match. Size, 9¼x8 inches.
No. 9204 Each $16.00

Misses black seal grain goat leather, broken bottom shape tan leather lining, German silver engraved metal frame, extra long silk cord handle, fitted with purse to match. Size [illegible] inches.
No. 9205 Each $5.00

Black silk velvet moire lined, with German silver French gray finish frame, extra long silk cord handle. Size, 7x6¾ inches.
No. 9206 Each $4.00

Black silk velvet with German silver frame, silk lining with extra long silk cord handle fitted with purse to match. Size, 9x7 [illegible] inches.
No. 9207 Each $5.00

ICE AND FIREMEN'S AXES

Ice Axe

ICE AXES

CHICAGO PATTERN

For Chopping Ice, Especially for the Ice Delivery man on the Wagon.

	Per Dozen
No. 60—Length of Head 15 in., Width of Bit 2⅞ in., Width of Point 4½ in.; Solid Steel, Red Body, Polished Bit and Pick, 28 in. Selected Hickory Handle, Weight 2¾ Lbs., without Handle	$18 00
No. 65 22 in. Handle, otherwise same as above	[illegible]

Half Dozen in a Box; Weight 45 Lbs. per Dozen

For Ice Saws, see page 767
For Ice Tongs, see page 1504

Firemen's Axe

FIREMEN'S AXES

UNDERHILL PATTERN, HANDLED

Used by Hook and Ladder Companies, also on Railway Trains, Boats, in Factories, Public Buildings, Schools, Hotels, Theatres, Etc.

	Per Dozen
No. 70—Assorted Weights, 4 to 4½ Lbs. 4½ to 5 in. Cut; 7¾ to 8 in. High, over Point; Extra Refined Steel, Polished Bit and Pick Painted Red Poll; Selected 36 in. Painted Red Handle	$36 00

One Dozen in a Crate

Average Weight 70 Lbs. per Dozen

Ship Axe

SHIP AXES

ZENITH, WARRANTED

Used by Boat Builders in Hewing Large and Heavy Timbers; a Common Bent Axe Handle is often Used.

	Per Dozen
No. ZS67—Assorted weights 5 to 5¼ Lbs., 6 to 7 in. cut; Extra Quality Steel. Gold Bronzed, Polished Bit and Head; Hardened Poll, Properly Strengthened through and under the eye to Stand the Hardest Usage	$30. [illegible]

Half Dozen in a Crate

Average Weight 70 Lbs. per Dozen

BUTCHERS' KILLING AXES

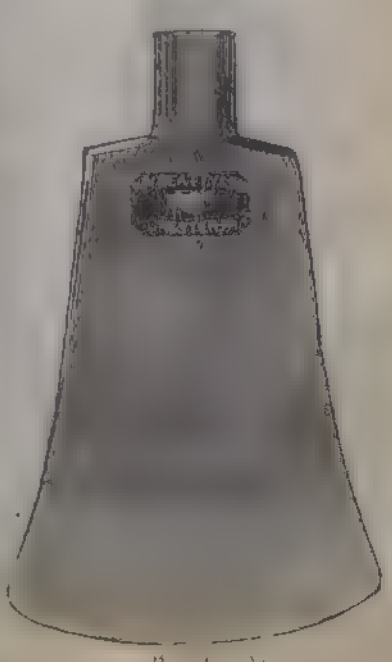
	Per Doz
No. 95 Assorted Weights 4 to 5 Lbs. Extra Quality Steel, Polished Bit, Painted Red	$25. 00
No. 96 Assorted Weights 5½ to 6 Lbs., Otherwise same as above	27 00

One Dozen in a Box

Average Weight 60 Lbs. per Dozen

Dimensions of Butchers' Axes

Weight, Lbs.	4	4½	5	5½	6
Width Bit, In.	4¾	[illegible]	[illegible]	[illegible]	[illegible]
[illegible], In.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]



Butchers' Axe

ADZES

ZENITH, LIPPED BIT SHIP
Warranted

Per Dozen
No. ZS441½—4 to 4½ in. Cut, Extra Quality Tool Steel, Gold Bronzed, Embossed Label, Polished Front of Bit, Crucible Tool Steel Cutting Edge, Hardened Head and Spur, Ground and Sharpened..... $40 00

Average Weight 50 Lbs. per Dozen

ZENITH, PLAIN BIT SHIP
Warranted

Per Dozen
No. ZS441½P—Assorted 4 to 4½ in. Cut Extra Quality Tool Steel, Gold Bronzed, Embossed Label, Polished Bit, Crucible Tool Steel Cutting Edge, Hardened Head and Spur Ground and Sharpened. $25 00

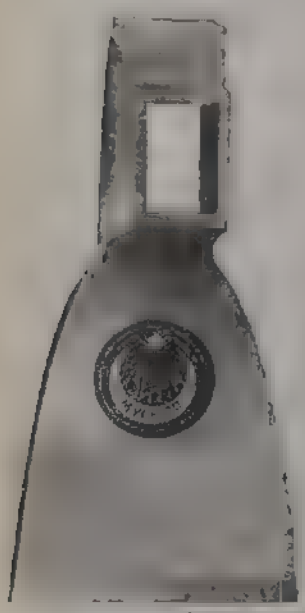
Average Weight 50 Lbs. per Dozen
One Dozen Assorted Sizes in a Box

WHITE, PLAIN BIT SHIP

No. WS45½—Superior Quality Steel, Black Finish, Blue Label, Polished Bit; Tool Steel Cutting Edge Ground and Sharpened

Width Bit, In	4	4½	5	5½
Wt. Doz. Lbs.	32	36	40	45
Per Dozen	$60.00	66.00	72 00	

Average Weight 60 Lbs. per Dozen



CARPENTERS' HALF HEAD

For Carpenters, Beam Workers and Wagon Makers

ZENITH, WARRANTED

Per Dozen
No. ZC341½—Assorted 3½ to 4½ in. Cut; Extra Quality Tool Steel, Gold Bronzed, Polished Bit and Head; Crucible Tool Steel Cutting Edge, Hardened Head Eye Punched from Solid Stock, Ground and Sharpened $24 00

Average Wt. 55 Lbs. per Doz.

OUR HAND MADE, WARRANTED

Per Dozen
No. XC341½—Assorted 3½ to 4½ in. Cut; Hand Forged from Extra Quality Tool Steel, Black Finish Crucible Tool Steel Cutting Edge, Hardened Head Ground and Sharpened $24 00

Average Wt. 55 Lbs. per Doz.

RAILROAD, FULL HEAD

For Tie Layers, Bridge Builders and General Railroad Work

ZENITH, WARRANTED

Per Dozen
No. ZR55½—Assorted 5 to 5½ in. Cut Extra Quality Tool Steel, Gold Bronzed, Embossed Label, Polished Bit and Head, Crucible Tool Steel Cutting Edge, Hardened Head; Eye Punched from Solid Stock; Ground and Sharpened $36 00

Average Wt. 60 Lbs. per Doz.

HAND MADE, WARRANTED

For Extra Hard Service; Especially for Section Men Strongly Reinforced where Strength is Needed.

Per Dozen
No. XR55—5 in. Cut; Full Head, Black Finish, Forged from Extra Crucible Steel, Ground Ready for Use..... $26.00

One Doz. in a Box; Wt. 65 Lbs.

One Dozen Assorted Sizes in a Box

FIRE EXTINGUISHERS

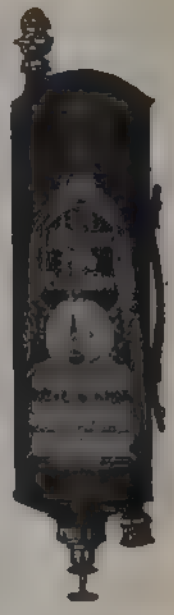
A FIRE DEPARTMENT CONSTANTLY WITHIN REACH

Regular Minimax

Regular Minimax
Illust. Hanging on Bracket

Non-Freezing Minimax

Fire Department
Minimax



Auto Minimax

MINIMAX

Our Minimax Apparatus, in which the regular as well as the non-freezing solution is contained, is the product of years of experience, which not only eliminates all the faults of the reversible type extinguisher, but has many additional advantages such as the absence of hose and mechanism. The Glass Tube containing the acid, being hermetically sealed, is air tight, which prevents the evaporation of the liquid, and when filled it remains in perfect working order for an indefinite period.

The Apparatus is set in action by striking the knob against the door or wall, driving the knob in the full distance. It throws a stream of Fire Extinguishing Liquid from 35 to 50 feet. It requires only one hand to use it thereby making it possible to climb stairs or ladders, open and close doors or windows or handle two Extinguishers at the same time, directing two streams of fluid on the fire at once.

Made of Best Steel, Painted; with Nickel Plated Trimmings. Bracket is furnished with every Apparatus

	Each
No. 31—Regular Size, Capacity, 1½ Gals. Length 30 in. Weight Filled, 18 Lbs. Each	$18 75
No. 32—Largest Size, Capacity 2½ Gals., Length 34 in. Weight, Filled, 29 Lbs. Each	23 25
No. 33—Smallest Size, for Private Residences; Capacity ¾ Gal.; Length 20 in. Weight, Filled, 7 Lbs. Each	15 75
No. 34—For Fire Department, with Stop Cock and Safety Valve; Capacity 2½ Gals.; Length 34 in. Weight, Filled, 31 Lbs. Each	24 25
No. 35—Non-Freezing, withstanding 54 deg. Frost; Capacity 1½ Gals.; Length 30 in. Weight, Filled, 22 Lbs. Each	24 75
No. 36—Non-Freezing, withstanding 72 deg. Frost; Capacity 1¼ Gals.; Length 30 in. Weight, Filled, 22 Lbs. Each	27 75
No. 37½—Automobile Extinguishers; Furnished with Solid Leather Case and can be carried in any position. Capacity 10 Pints, Length 24 in.; Weight, Filled, 15 Lbs. Each	$37 50

EXTRA CHARGES

	Each
No. 101—For Extinguisher No. 31	$1 15
No. 102—For Extinguisher No. 32	1 15
No. 103—For Extinguisher No. 33	1 15
No. 104—For Extinguisher No. 34	1 15
No. 105—For Extinguisher No. 35	3 75
No. 106—For Extinguisher No. 36	4 00
No. 107½—For Extinguisher No. 37½	1 15

Note—Extra Charges for Nos. 31, 32, 33 and 34 are furnished Free of Charge whenever our Extinguishers are used on actual outbreaks of fire. Extra Charges for Nos. 35 and 36 cannot be furnished Free of Charge, even if Extinguisher has been used on a fire.

INSTRUCTIONS FOR FILLING

(1) Take a thoroughly clean pail full for Apparatus No. 31 with 11 pints, Apparatus No. 32 and 34 with 18 pints, Apparatus No. 33 with 6 pints and Apparatus No. 37½ with 10 pints of warm water, about 95 deg. Fahrenheit. Dissolve powder contained in cardboard box by stirring thoroughly. Rest Apparatus on its metal end. Unscrew plunger on broad base, with attached wrench, take out perforated metal basket. (2) Fill tank with solution until water runs from nozzle. Let run till overflow stops, it indicates tank is properly filled. Never manipulate pointed end, it is in proper condition. Fill glass tube, pointed end first, in perforated metal basket, holding both horizontally. (3) See to it that washer rests flat underneath plunger, metal basket and is not twisted. Insert metal basket containing glass tube into filled apparatus. (4) Take plunger, pull knob attached to pin, replace plunger on apparatus, and screw on tight with wrench. Be sure to use New Washer each time when refilling.

Extra charges for the Non Freezing Extinguisher consist of one gallon can of non freezing liquid, one glass tube acid, one half pound powder. This liquid is to be used in place of the warm water in recharging, as described above in the directions for filling.

NOW EXTINGUISHER IS READY FOR USE

(5) Next screw two piece bracket vertically on solid wall or woodwork. Adjust bracket as to size of machine. Hang and attach apparatus with muzzle upward. After having been used, clean apparatus thoroughly and refill again as stated.

FIRE EXTINGUISHERS

A Fire Department Constantly Within Reach

Used in Hotels, Public Buildings, Machine Shops, Factories, Mills, Hospitals, Asylums, Theatres, Museums, Railway Shops, Depots, Club Houses, Wholesale and Retail Establishments and Private Homes. Time is of the utmost importance when fighting an incipient fire, when every second saved frequently means the saving of many lives and thousands of dollars worth of property; nine times out of ten, prompt action will prevent what might be a disastrous conflagration. Statistics show that in all large cities more than half the fires are put out with Chemical Fire Extinguishers; Burning Oil, Naphtha, Celluloid, etc., which can not be extinguished with water, are easily handled by these chemicals. It is not, How much can you afford to spend for fire protection, but how much can you afford to lose without it?

PARAGON

Approved by the National Board of Underwriters. Tested to 350 Lbs. Pressure, the Shell and Ends are one Continuous Piece of Cold Rolled, Hard Tempered Copper. Riveted and Heavily Lined with Lead, the Inside is Coated to prevent Corrosion; the Cage which holds the Acid Bottle rests securely on a Ring within the Collar and can be instantly removed with the fingers; its Action is Instantaneous and Automatic.

	Each
No. 41—Capacity 3 Gallons, Height 22 in., Diam. 7⅝ in.; will throw a stream of Charged water from 40 to 50 feet, and one charge is as effective as 50 Pails of Water. Weight 30 Lbs. Each	$10 00

No. 111—EXTRA CHARGES

	Each
4 Oz. Sulphuric Acid, 1¼ Lbs. Baking Soda	$0 60

For Machines exposed to zero weather add 2 Lbs. of Fine Salt. Renew charges once every year.

HARDEN

Approved by many local Boards of Insurance Companies. Tested to 300 Lbs. Pressure. Made of Finely Polished Copper, will throw a stream of chemically charged water 50 feet.

While not officially recommended by the National Board, we have sold these for many years and will testify as to their efficiency and money value.

	Each
No. 42—Capacity 3 Gallons, Height 22 in., Diam. 7⅝ in. Weight 30 Lbs. Each	$13 00
No. 43—Capacity 5 Gallons, Height 23 in., Diam. 9⅝ in. Weight 50 Lbs. Each	15 00

EXTRA CHARGES

No. 112	Each
3 Gal.—4 Oz. Sulphuric Acid, 1¼ Lbs. Baking Soda	$0 60
No. 113	
5 Gal.—6 Oz. Sulphuric Acid, 2¼ Lbs. Baking Soda	.80

MANVILLE DRY POWDER EXTINGUISHERS

Of special value in fires of Acetylene, Gasoline Oils as well as Electrical fires, where water cannot be used. Is offered in glass tubes in a Neatly Decorated Tin Tube. The Dry Chemical Powder is Non-Poisonous, will not explode, freeze nor corrode, is ready for Instant Use and is operated by simply dashing the contents at the base of the fire.

	Each
No. 45—Size of Tube 22x2¼ in. One Dozen in a Case; Weight 3 Lbs. Each	$3 00

HAND GRENADES

In Public Buildings, such as School Rooms, Offices, etc., these will be universally salable. The Saloon and Restaurant with its Vapor Lamp Urn is also a good field.

Glass Filled with a Chemical Compound to be hurled at the base of a fire and broken.

	Per Dozen
No. 46—1 Pint; Height 2¾ in., Diam. 3 in.	$7 00
No. 47—1 Quart; Height 6 in., Diam. 4 in.	9 00

Weight 1 Pint 40 Lbs.; 1 Quart 60 Lbs. per Dozen. One Dozen in a Box.

NEWMAN IMPROVED PORTABLE WATCHMAN'S CLOCKS

For use in Lumber Yards, Mines and All Places requiring Outside Stations; Approved by the National Fire Protection Association for use under the Rules of the National Board of Fire Underwriters

The Case is made of Aluminum, is light and will not tarnish from acids or grease.

The Mechanism that does the marking is so locked with the keys that it cannot be made to work unless the key fits exactly and has been inserted in the station to which it belongs. The keys will only operate in the station to which they belong.

The Watchman carries the station keys in a leather pouch with a belt and buckle to suit his convenience.

The Registering is visible from the outside, the dial showing the station visited by each of the keys.

A Time piece Dial shows the watchman the time to start from stations, and the time he should take in making such rounds which are to his satisfaction, or necessary to use twelve-hour watchman's dials they will be furnished.

The Key is held in a small iron **Station Box,** which is fastened with two Flat Headed Screws and covered with a Private Seal Fire Key, fastened, so that if removed by the watchman it cannot be placed back again. **The Watchman** visits the Station and raises the lid which remains open until he has used the key; when he lets go, it returns to its hanging position and the cover drops down automatically.

Made in Two Sizes, for nine and sixteen stations, marking in one line from center. **The 16-key watch can be arranged for any number of stations.**

	Each
No. 9—Nine Station, Diam. 4 in., Wt. 28 Oz., Shipping Weight Complete 18 Lbs.	$100 00
No. 16—Sixteen Station, Diam. 4¼ in.; Wt. 34 Oz.; Shipping Weight Complete 28 Lbs.	110.00

One in a Box with Keys; Leather Pouch and Strap, Iron Station Boxes, Seals and Box of Paper Dials for one year.

EXTRA PAPER DIALS

	Per Box
No. 9X—For 9 Station Clock; Diam. 3¼ in.	$5 00
No. 16X—For 16 Station Clock; Diam. 4 in.	5 00

365 in a Box. Weight 1 Lb. per Box

FLOATS

Egg Shape Wood Floats, in	1½	1¾	2
Per dozen	$0.40	.40	.50

Barrel Shape Wood Floats, in	2½		3
Per dozen	$0 40		.50

Egg Shape Cork Floats, in	1	1	1¾	2
Per dozen	$0 70	.70	.70	.80

Barrel Shape Cork Floats, in	2	2½	3
Per dozen	$0 80	.90	1 00

"CATCH THE NIBBLER" ADJUSTABLE CORK FLOATS

Genuine porcupine quill and cork. Very sensitive. The float is easily adjustable on the quill. Finished in green and white waterproof enamel.

No. 952. Total length 6 in. ..... per dozen, $1.50

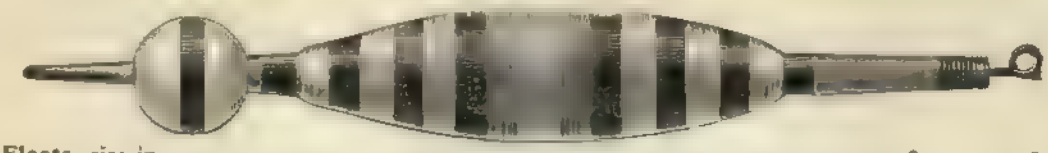
GENUINE PORCUPINE QUILL FLOATS

Mounted with a brass ring and flexible line fastener. Made of selected Genuine Porcupine quills, bound and varnished.

No. 320. 4 in., per gross ..... $3 16 **No. 320.** 6 in., per gross $4 00

FLOATS

Ideal Cork Floats, length of body, in.	2	2½	3	3½	4	5	6
Per dozen	$						



Pilot Cork Floats, size in.	2	2½	3
Per dozen	$1.20	1.50	1.70

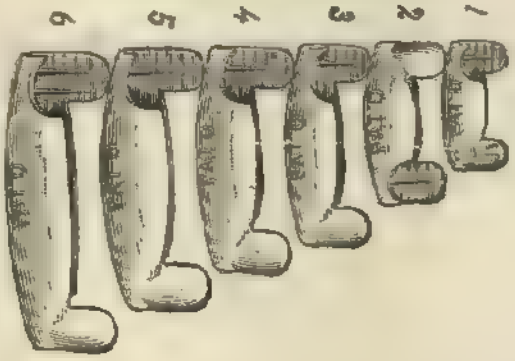
LEAD SINKERS

Brass Ringed Lead Sinkers

Sizes	6	7	8	9	10	11	12	13
Weight oz.	½	⅜	¼	⅛	⅛	1/16	1/16	1/32
Per gross	$2.50	1.80	1.60	1.20	1.10	1.00	1.00	1.00

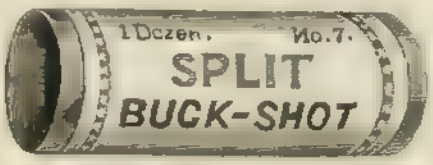
Size 6 one-half gross, other sizes one gross in a box

SARANAC SINKERS



Nos.	1	2	3	4
Per gross	$0.80	1.00	1.25	1.50

SPLIT SHOT SINKERS



No. 7. Buckshot, per dozen $0.40

One dozen in a box

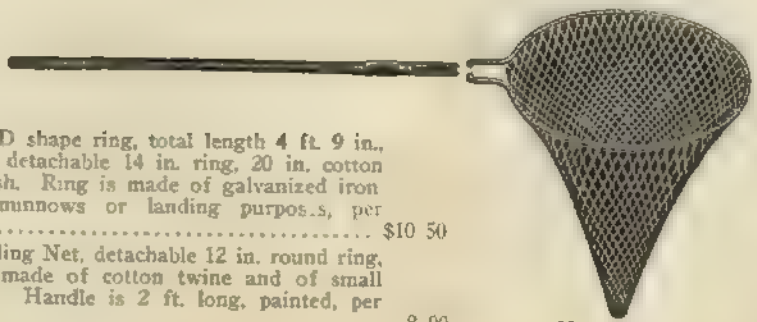
DIP NETS

No. 207. Dip Net, D shape ring, total length 4 ft. 9 in., painted handles, detachable 14 in. ring, 20 in. cotton net of small mesh. Ring is made of galvanized iron. Complete, for minnows or landing purposes, per dozen $10 50

No. 205. Boat Landing Net, detachable 12 in. round ring, with 14 in. net made of cotton twine and of small mesh at bottom. Handle is 2 ft. long, painted, per dozen 8 00

No. 207

No. 60. Wood bow and handle, 12 in. handle, 20 in. cotton net .....

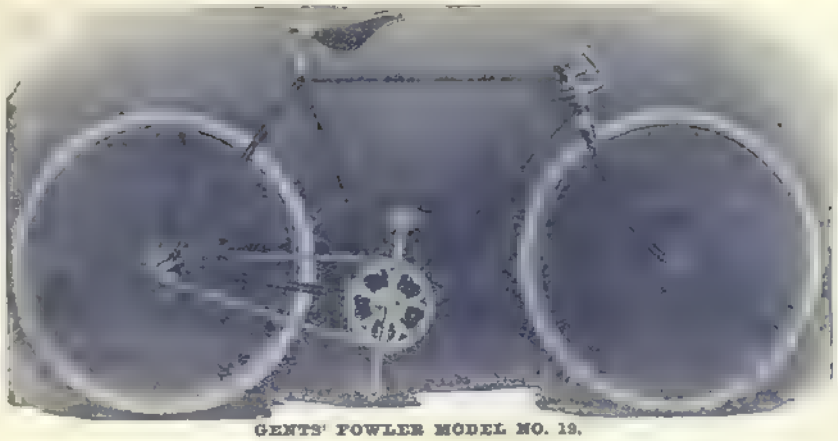


No. 205

..per dozen, $8.00

Every road is a good road to him who owns a Ford. It is not confined to the highways—it takes the by-ways always with equal ease. Anywhere a cart will go, there the Ford will carry you in comfort and safety—at a fraction of the cost.

75,000 Ford cars already sold this season—one-third of America's product. Five passenger touring car $690—three passenger roadster $590—torpedo runabout $590—delivery car $700—town car $900—f. o. b. Detroit, complete with all equipment. Get catalogue from Ford Motor Company, Detroit, Mich.



GENTS' FOWLER MODEL NO. 19.

Celebrated and Renowned "Fowler" Bicycles

The "FOWLER"

The best, most durable, well constructed, most popular and satisfactory bicycle on the market.

YOU CAN MAKE MONEY

Not by buying cheap bicycles, but by getting good salable bicycles cheap. We offer the following "Fowler" bicycles, which are **strictly guaranteed** at an exceptional low price. The best of material and workmanship is employed in their construction

Nos. 19 and 20 are strictly high-grade 1912 model with [illegible] fittings. Our immense contract for wheels for the coming season enables us to sell you the best wheel on the market at second quality price.

Gents' Fowler No. 19 Model.....Each $62 00
Ladies' Fowler No. 20 Model.....Each 64 25

GENTS' FOWLER No. 17 MODEL

Equipped same as Model No. 19, excepting frame specifications, which are 1⅛-inch tubing flush joints, ⅝ inch rear stays, rear forks ⅞-inch oval forged crown.

Gents' Fowler No. 17 Model.....Each $60.00

SPECIFICATIONS.

FRAME.—Height 21 and 23 inches. Main frame tubes, Shelby seamless one-inch 20-gauge tubing. One-piece head, with long tapered reinforcements. Upper rear stays ⅝-inch oval, lower rear forks ⅝-inch round to oval. Drop forged, flat racer design. Front fork crown, nickel plated, with extra strong racer fork sides.
FINISH. Plain black, hand rubbed and hand polished.
HANGER.—Fauber one-piece with crown sprockets, diamond shape cranks, 7-inch.
HUBS.—Thor, turned from the bar. Dust proof
RIMS.—Lock joint, enameled to match frame.
CHAIN.—Genuine Baldwin detachable, 3-16 inch, or Diamond B block.
TOOL BAG.—Bag complete with tools.
GEARS.—Sprockets, 24 or 26 front, and 8 and 9 rear
OPTION.—Frame, 25-inch; finish, blue, maroon or Brewster green

TIRES.—Hartford single tube No. 70 regular, 1½-inch Morgan & Wright, or Goodrich No. 19.
HANDLE BAR.—Chicago 2½-inch extension.
PEDALS.—B. G. I
SADDLE.—Persons suspension or Troxel padded
IN GENERAL.—Tread 4⅛ inches, drop in hanger 2¾ inches, weight 24 pounds, wheel base 42 inches, handle bar stem ⅞ inch, seat post 15-16 inch diameter. Retainers in every bearing. Heads 4⅞, 6⅛ and 8⅜ inches, with ⅛-inch balls.

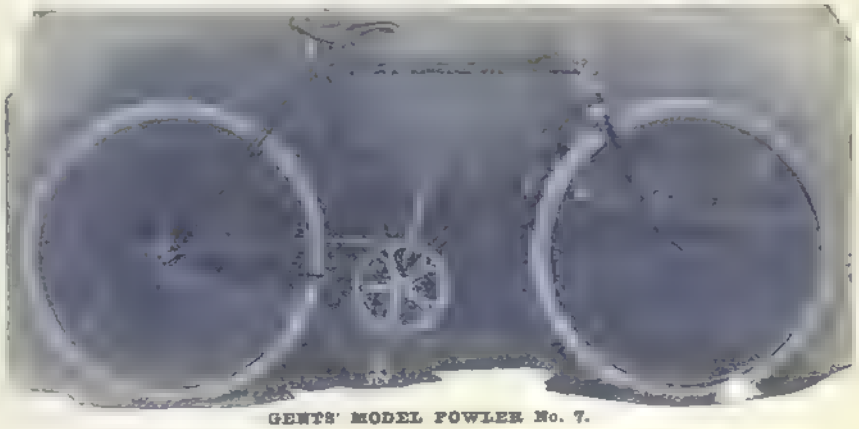
G. & J. Clincher Tires furnished on Models 17, 19 and 20 extra. List, per pair $6 50
New Departure, or Corbin Coaster Brakes, also furnished. List, extra, each $11 25

The Best Medium Priced Wheel which You can Rest Assured is Worth Buying

The "Fowler" Nos. 7 and 8 are guaranteed throughout, exceedingly well built and up-to-date, which can only be compared with the highest grade 1912 Model.

We recommend this wheel for service and its known satisfaction is unparalleled.

Gents Fowler No. 7 Model .....Each $50 00
Ladies' Fowler No. 8 Model .....Each 51 75



GENTS' MODEL FOWLER No. 7.

SPECIFICATIONS.

FRAME.—Heights 21 and 23 inches. Main frame tubes Shelby seamless tubing, one and one-eighth inches. One-piece head, with long tapered re-inforcements. Drop forged, flat square, front fork crown nickel plated, with extra strong fork sides.
FINISH. Plain black
HANGER. Fauber special one piece round Cranks 7-inch
HUBS. Thor M S turned from the bar
RIMS. Enameled to match frame.
CHAIN.—Indianapolis B block
GEARS.—Gents 22, 24 or 26 front, and 8 and 9 rear, 26x9 regular Ladies' 22 or 24 front, 8, 9 and 10 rear.
TIRES.—Wabash single tube, 28x1⅛ inch regular
HANDLE BAR.—Perfection adjustable
PEDALS. B. G. I

SADDLE. Padded.
IN GENERAL.—Tread 4⅛ inches, drop in hanger 2¾ inches; weight 24½ pounds, wheel base 42 inches, handle bar stem ⅞ inch. Seat post 15-16 inches diameter. Ball retainers in every bearing. Heads 4⅞ inches, 6⅛ inches and 8¼ inches, with ⅛-inch balls.
TOOL BAG.—Bag complete with tools.
OPTION.—Frame, 25-inch; finish, blue, maroon or Brewster green.
Ladies' Fowler No. 8 Model is equipped same as Gents' Model No 7, excepting that it has **ladies' saddle and dress guard,** steel chain guard and wheel guard, and rubber combination pedals.

Morgan & Wright tires...	Per pair	$ 4 80 List extra
G. & J. or Palmer tires	Per pair	6 00 List extra
New Departure or Corbin coaster brakes		11.25 List extra

Boys' Juveniles

No. 1 Frame, 16 inch, 24 inch wheels ... Each $45 00
No. 3 Frame, 18 inch, 26-inch wheels ... Each 46 75

BOY'S JUVENILE MODEL NO. 1.

Girls' Juveniles

No. 2 Frame, 16-inch, 24-inch wheels. Each $45 00
No. 4 Frame, 18-inch 26-inch wheels Each 46 75

SPECIFICATIONS.

FRAME.—Shelby seamless tubing. Main tubes 1 inch. Rear forks [illegible] inch. Special design crown.
COLOR.—Black or black with red head, ⅝ inch
HANGER.—Fauber one piece.
CRANKS.—6½ inch.
GEAR.—26x8
TIRE.—Hartford single tube or M. & W double tube
PEDALS.—Rat trap or combination rubber.
SADDLE.—Padded
HANDLE BAR.—Adjustable

OPTION

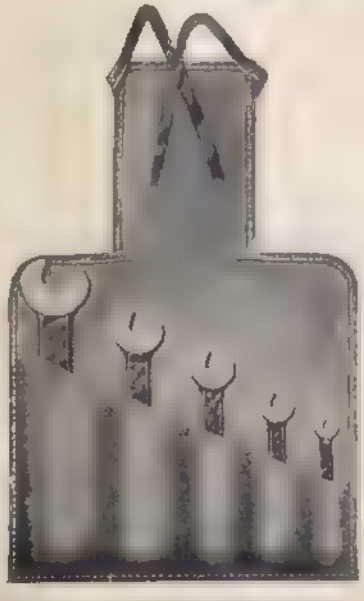
FINISH.—Maroon, blue, Brewster green.
Corbin Coaster Brake extra.....List $11.25

MAKING THE MOSSBERG MOVE

Install — "Mossberg" Stamped Steel Wrench

Quick Sales Gratifying Profits.

Our catalogue do not feel at home — with us.



FRANK MOSSBERG COMPANY

Attleboro, Massachusetts, U.S.A.

AGENCIES AT
New York Chicago San Francisco Dallas
Waynesville, N C.

EXPORT AGENTS
GUITERMAN, ROSENFELD & CO
35 South William St. New York, N Y.

A Real Window —— A Perfect Chute

Coal Chute Comment

Your choice of a coal chute line will depend upon the worth of the chute to the user and the margin of profit for you.

We offer in The Window Chute, a chute that's a window, too — a light-admitting, rough-usage coal chute, that carries unusual profit with each sale

Get our agency plan

Holland Furnace Co.
Dept. "D" Holland, Mich.

ACME

STEEL DOOR MATS

With the spring weather at hand a demand is created for door mats. Many dealers have already ordered their stock, but to those who now contemplate ordering, we suggest you try "ACME MATS."

ACME MATS are constructed to thoroughly clean the feet. They are strongly made, substantial and absolutely sanitary. The dirt cannot clog in the mat. It falls through to the floor. That is why ACME MATS are good sellers. They net dealers a good profit, too.

Descriptive Matter and Net Prices on Application

ACME STEEL GOODS CO.

WORKS and MAIN OFFICE: CHICAGO
NEW YORK SAN FRANCISCO ATLANTA

AMERICAN
SCREEN DOOR CATCHES

No. 3—With Lock
(SHOWING THE DOOR CLOSED AND LOCKED)

The Catch that Latches The Latch that Catches
The Lock that Holds

There is an opening for a sale with every piece of wire cloth, screen door set sold. Easy to sell, easy to adjust. Fits any door that swings.

Burgess-Norton Mfg. Co.
GENEVA, ILL.

LION GAFF: Nothing equal as a landing device, and the best FROG catcher to be had. Does not butcher up the frog like the ordinary gig or spear does.

Norlund's Steel Fish Spear is the only spear on the market guaranteed to stand the rocks without bending or breaking.

A spear with a guarantee like that back of it is worth handling, isn't it?

Insist on your jobber supplying you with Norlund's Gaffs and Spears.

The Norlund Mfg. Co.
Williamsport, Pa.

GASOLINE SOLDERING FURNACES

For Roofers, Tinners, Metal Workers, Plumbers, Electricians, Repair Shops, etc.

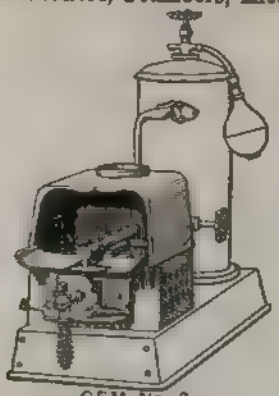
LUNDY DOUBLE BLAST

Will heat soldering iron twice as fast and with one-half as much gasoline as Common Furnace and will always have a hot iron ready for the tinner, thus saving much time. The flames are forced from the out side to the center so that when one iron is in use, the other receives both hot blasts directly on it. Independent Generating Valve allows adding of more gasoline to Drip Cup, if operator does not get enough to generate the first time, without waiting for Generator to cool off. The Generator is made of Brass and will not rust, has a 5/8 in. opening which cannot become clogged but will always burn a blue flame. Large Powerful Brass Pump, size 1x10 in., is attached rigidly and cannot get out of order

Each

No. 25—Tank Capacity 1 Gallon; Galvanized Steel Tank, Aluminum Painted, size 5x12 in.; Strong Base with Heavy Wire in Bottom; Height 15⅛ in., Size of Base, 7⅝x10 in. ..$17.00

One in a Crate; Weight 25 Lbs. Each



GEM No. 3

Especially recommended for Roofers' and Tinners' Use; the Burner emits a 4 inch Flame for each Soldering Copper; For Bench Use or Outside Work it is unsurpassed, Distributes Flame full length of Coppers; Patent Drip Cup Generates Gas without smoke, odor or noise; Has Improved Slotted Cast Iron Burner, cannot clog with Solder, takes all sizes of Coppers, furnishing a Powerful Flame, and will last for years

No. 3—Tank Capacity 3 Quarts, Height 16 in.; Heavy Sheet Steel Base, Size 21x7 in.; Fire Proof Copper Reservoir, Has Regulating Valve, Black Rubber Bulb and Stem, Malleable Handle, Covered with Enameled Wood $12.00

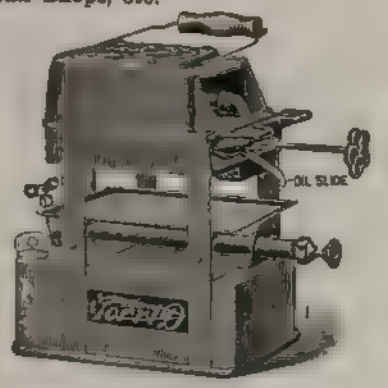
One in a Crate; Weight 22 Lbs. Each

EXTRA PARTS FOR GEM FURNACES

Each

Rubber Bulb and Stem.....$0.60

Generator Valve ..... .75



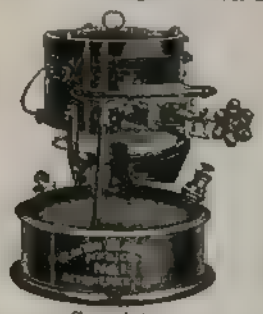
TORRID

Has a Low Setting, Rectangular Tank, to avoid upsetting on Roof Work. Burners are formed to throw Flame from Sides to Center, thereby concentrating all the Heat upon the Coppers; Has 10 in. Set Air Pump, Cast Metal Turret Hood, Removable Cover. Flame can be run very low. Is Noiseless in Operation, the Generating Pipe and Needle Valve can be taken apart quickly for Cleaning; Especially Well Adapted for Sheet and Metal Workers' Use.

Each

No. 10T—Tank Capacity 1 Gallon; Height 12 in., Size Base 10x16⅛ in.; Galvanized, 18 Gauge Sheet Steel Tank, Aluminum Finish; Cast Metal Furnace; Will Heat 8 to 12 Lb. Coppers Indoors or on Roof; Burns ¾ Pint of Oil per Hour if Full Blast $10.00

One in a Box, Weight 22 Lbs

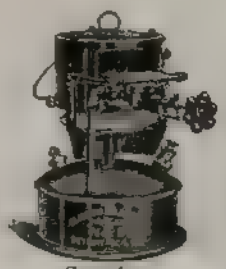


Complete

Top Section

Base

Removing the Top Section converts the Furnace into a Blow Torch



Complete

GASOLINE BLOW TORCHES

Galvanized Steel Tank, with Cast Iron Cover and Cast Iron Bottom Rim which protects and strengthens it, Japanned Steel Hood with Bail

The Burner being outside of Hood, it does not clog nor get eaten out by Drippings

For Tinners or Cornice Workers

Each

No. 1—Tank Capacity 7 Pints, 9 in Diam., 3¾ in High, Height Over-all 12 in.; Also has Larger Burner than Size 5. Net Weight 9½ Lbs $9.00

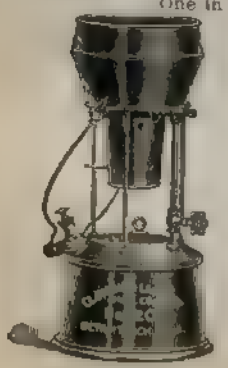
One in a Box, Weight 14 Lbs. Boxed

Tinners' Special

Each

No. 5—Tank Capacity 5 Pints, 8 in. Diam., 3¾ in. High; Height Over-all 11½ in.; Easily Carried About; Net Weight 8¼ Lbs. $7.00

One in a Box; Weight 13 Lbs Boxed



GASOLINE, COIL FIRE POTS

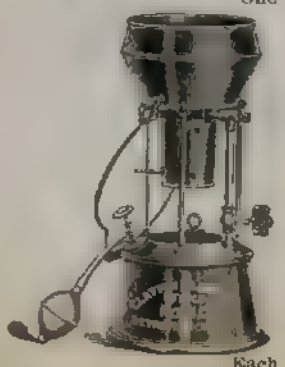
Galvanized Steel Tank, with Galvanized Cast Top, and Galvanized Cast Protecting Ring at Bottom; Black Sheet Steel Fire Pot, Heavy Pipe Coil, Special Steel Burner; Needle Point Valve controls Fire perfectly and fits tightly. Large and Powerful Generator produces a strong flow of Gas and a Pure Blue, Intensely Hot Flame.

Plumbers' Furnaces

Tank Capacity 4 Quarts, Diameter of Base, 8½ in., Height 18 in.

Each

No. 20—With Improved Brass Air Pump $6.50



No. 10—With Rubber Bulb and Tube Pump $6.00

One in a Box; Weight 13 Lbs. Each

MELTING POTS

CLAYTON & LAMBERT

Used in connection with Soldering Furnaces to melt Solder, Lead, Tin or Other Metals

Diameter, in.	5	6
Capacity, Pints	1	2
Weight Each, Lbs.	2½	3¼
Each	$0.50	.70

Open Stock

GERMAN SILVER NICKEL PLATED STARS, SEALS AND BADGES

Prices on all Stars, etc., illustrated on this page include any ordinary inscription. Extra charge will be made for inscriptions of extra length or fancy designs. Cuts are full size. All stars furnished in gold plate at extra cost.

LIST PRICES EACH.

INDIVIDUAL [illegible]
No. 9778 German Silver ..... Each $1.00
No. 9779 Rolled gold plate ..... Each 4.00

No. 9780 ..... Each $3.00

No. 9781 ..... Each $3.00

No. 9782 ..... Each $5.00

No. 9783 ..... Each $5.00

Special Quotations Furnished in Lots of 10 or More.

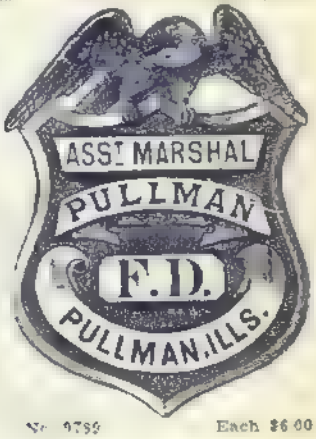
No. 9784 ..... Each $2.00

No. 9785 ..... Each $2.00

No. 9786 ..... Each $4.00

No. 9787 ..... Each $5.00

No. 9788 ..... Each $2.00



No. 9789 ..... Each $6.00

No. 9790 ..... Each $2.00

No. 9791 ..... Each $1.

Fitted with wooden handle.
No. 9792 ..... Each $2.40

No. 9793 ..... Each $1.50

SEAL
Fitted with wooden handle.
No. 9794.. Each $2.00

SEAL
Fitted with wooden handle.
No. 9795 ..... Each $2.00

Fitted with brass or wooden handle.
No. 9796.. Each $2.40

No. 9797 ..... Each $2.00

GILLETTE SAFETY RAZORS

No. 500

Pocket Edition

No. 500. Plain triple silver plated case velvet lined, and razor, each $5.00

Set contains 12 double edged Gillette blades in metal box plated to match razor

Pocket Edition

No. 501A

Same style case as No. 501.

No. 501A. Gun metal case, velvet lined and gold plated razor, each $5.50

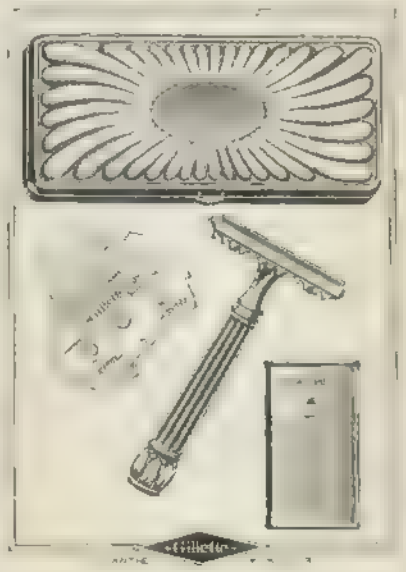
Set contains 12 double edged Gillette blades in metal box, plated to match razor

No. 501

Pocket Edition

No. 501. Basket pattern, triple silver plated case, velvet lined, and razor, each $5.00

Set contains 12 double edged Gillette blades in metal box, plated to match razor



No. 502

Pocket Edition

No. 502. Shell pattern, triple plated case, velvet lined and razor, each $5.00

Set contains 12 double edged Gillette blades in metal box, plated to match razor

No. 460

Standard Razor

No. 460. Morocco leather case, velvet lined, triple silver plated razor, each..... $5.00

Set contains 12 double edged Gillette blades in metal box plated to match razor.

No. 461

Combination Set

No. 461. Consists of triple silver plated razor, 12 double edged Gillette blades in metal box. Telescope pattern badger hair brush, stick Gillette shaving soap in silver plated holder. Velvet lined Morocco leather covered case, each. . $6.00

GILLETTE BLADES

6 blades in a package, per package..... $0.50

12 blades in a package, per package. $1.00

SAFETY RAZORS

AUTO STROP STANDARD OUTFIT

No. 1 Standard Outfit, in compact handsome velvet lined case, size 2x4 in. Quadruple silver plated safety razor, one dozen blades and horsehide strop, each..$5.00

AUTO STROP TRAVELERS' SET

No. 15 Travelers' Outfit, in velvet lined leather case, size 3¼ x 3¾ in. Consists of quadruple silver plated self stropping safety razor, one dozen blades, horsehide strop, collapsible shaving brush and shaving stick, in silver plated push bottom box, per set.....$6.50

Extra Blades, 12 in package, per package.....50

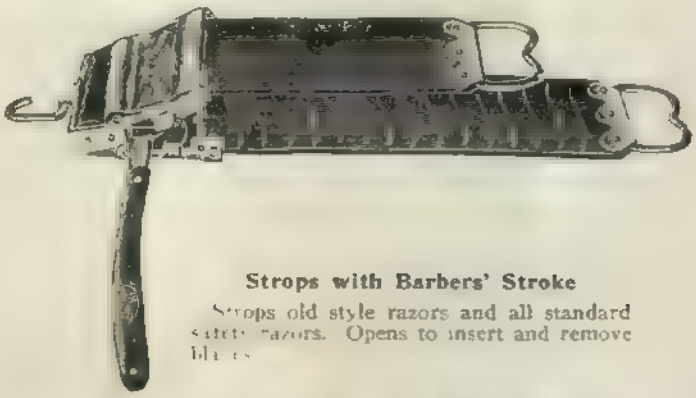
RAZOR STROPPERS

GEM JR. SPECIAL

Gem Jr. Special. New style, each.....$5.00
Consists of "New Era" Gem Jr. frame, highly nickel plated and polished, combination stropping and shaving tool, seven genuine Gem Damaskeene blades, put up in a highly polished self unloading metal box

One set in a velvet lined box

BOKER'S UNIVERSAL



Strops with Barbers' Stroke

Strops old style razors and all standard safety razors. Opens to insert and remove blades

Boker's Universal Stropper. Solid horsehide strop, scored in scroll form, metal parts full nickel plated, each.....$1.00

KANNER'S SLYDE STROKE STROPPERS

For Old Style and Safety Razors

Kanner's Slyde Stroke Stropper, with two safety Blade holders, each.....$2.50

The holders are adapted for all makes of safety razors. They are made of the very best materials and are guaranteed to sharpen any razor blade

ZIG ZAG STROPPERS

Improved Zig Zag Automatic Stroppers, metal handle, with fine horsehide strop. For all makes of safety razors. Each.....$1.50

EXPRESS WAGONS

Gold Medal

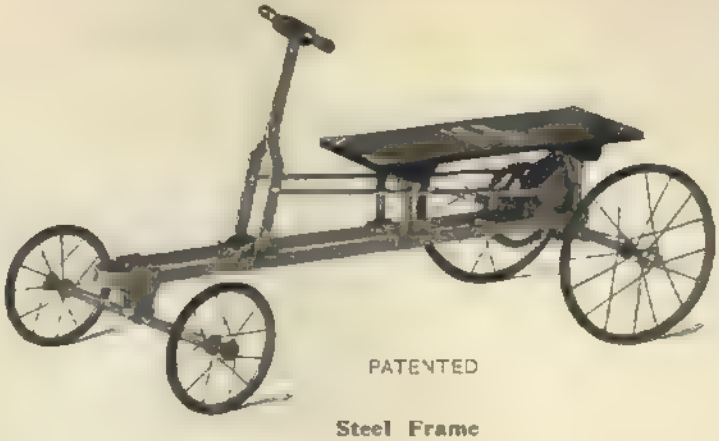
All steel, no malleable or light stamped castings used in its construction. The tripod and tongue irons are exclusive in pattern and make a strong running gear. The finish is a handsome red enamel on outside green enamel on inside, gold lettering. Bearings and wheels finished in Japan baked black enamel tongue is natural wood color with metal pin through handle

No.	Bed	Wheels	Per Doz.
03	10 x 20 x 3¼ in.	7 and 10 in.	$14.00
0	12 x 24 x 4 in.	8 and 12 in.	19.00
1	13 x 26 x 4¼ in.	10 and 13 in.	22.50
2	14 x 28 x 4½ in.	11 and 14 in.	25.00
3	15 x 30 x 5 in.	12 and 15 in.	27.50
18 Toy	6 x 12 in.	5 and 5 in.	8.00

Gold Medal Assortment. Two each of Nos. 0, 1 and 2 in a crate, per crate..... $52.50

Regularly packed one quarter dozen in a crate

AUTO EXPRESS



Steel Frame

Auto Express. Total length 41 in., front wheels 8 in., rear wheels 12 in. diameter, tires rubber, 1 in. Both bearings of one piece stamping. Made adjustable to ages 4 to 14. Frame is enameled black, wheels tinned, seat brilliant red with attractive decorations, each.....$6.00

COASTER WAGONS

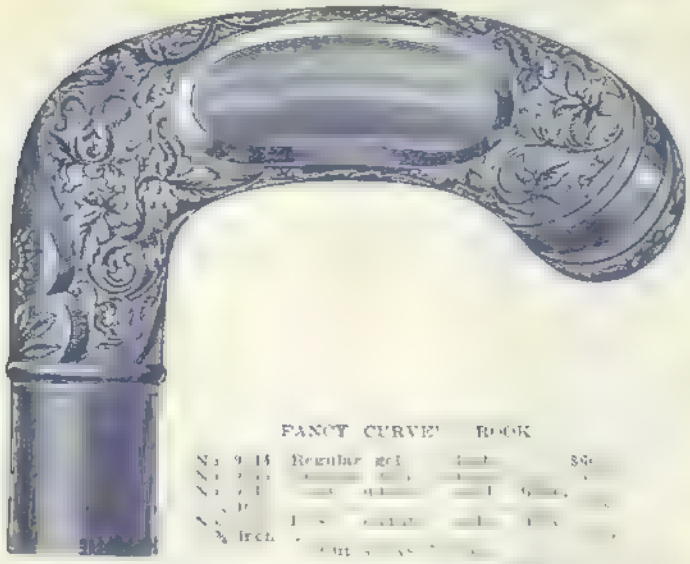
Has perfect steering mechanism which operates equally well with express box on or off. Steel gear. Channel steel arch construction. Front and rear axles strongly braced. Axles 1 in. round steel. Large and strong malleable fifth wheel. Extra heavy wheels with easy running steel roller bearings. Hubs solid rolled maple spokes. White ash bottom with removable skeleton type express box. Hard maple pole. Equipped with hand brake. Attractively finished.

No. 1A. Size of bottom 14½ x 36 in., wheels 8 in. diameter.....per dozen, $60.00
No. 2A. Size of bottom 14½ x 36 in., wheels 11 in. in diameter.....per dozen, 72.00
No. 3A. Size of bottom 16¼ x 40 in., wheels 11 in. in diameter.....per dozen, 80.00

Shipped knocked down, two in a crate

Gold, Gold Filled and Silver Cane and Umbrella Heads

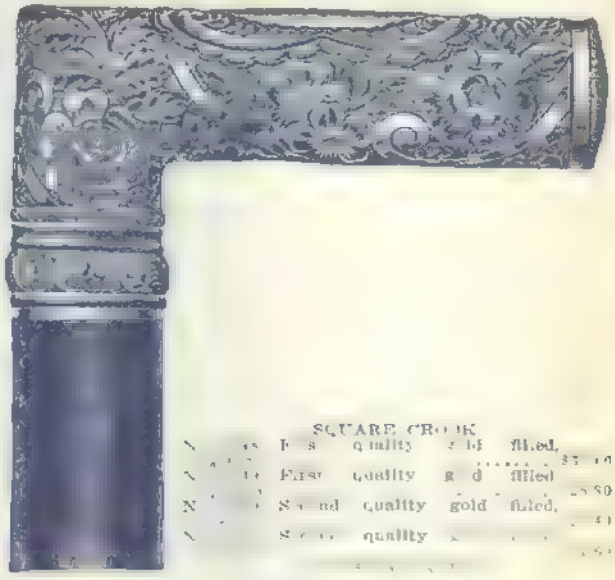
Prices quoted are for complete canes with fine quality solid ebony sticks. Heads only, without ebony sticks can be furnished if so desired. Deduct from complete prices quoted, cost of ebony sticks as follows: 1-inch, $3.55; ⅞-inch, $3.00; ¾-inch, $2.50; ⅝-inch, $2.20; ½-inch, $2.00. PRICES EACH.



FANCY CURVED BOOK

No. 9,14	Regular gold	$8
¾ inch		

Cut shows 1-inch.



SQUARE CROOK

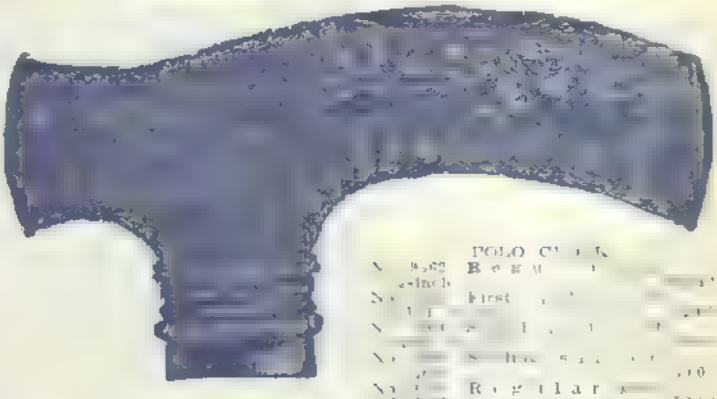
	Fine quality gold filled,	$5 00
	First quality gold filled	3 50
	Second quality gold filled,	2 50
	Second quality	1 50

Second quality gold filled.

	$13 00

Second quality gold filled

	$ 00



POLO CROOK

	Regular	12 50
	First quality	10 00
	Second quality	7 50
	Second quality	5 00

Fine quality gold filled

		$8 00
	¾-inch	14 50
No.	1-inch	4 50
No. 9234	⅞-inch	4 00
No. 9235	⅝-inch	3 50

Cut shows 1-inch.

First quality gold filled

No. 9278		$21 00
	⅞-inch	17 50
No. 9278	1-inch	10 50
		9 00

Extra quality, regular gold filled

No. 9280		$ 00
No. 9281		
	gold filled	
No. 9282		13 50

Extra quality, regular 18k. gold filled

No.		$ 00 00
No.	1-inch	44 00

PRICE OF UMBRELLAS WITHOUT HEADS—NO EXTRA CHARGE FOR FITTING

No. 9386	Fine Union silk taffeta, with tape edge	25 inch	$ 50
No. 9387	Extra fine Union silk taffeta, with tape edge	28 inch	5 50
No. 9388	Fine pure silk taffeta, with tape edge	26 inch	9 50
		28 inch	11 00

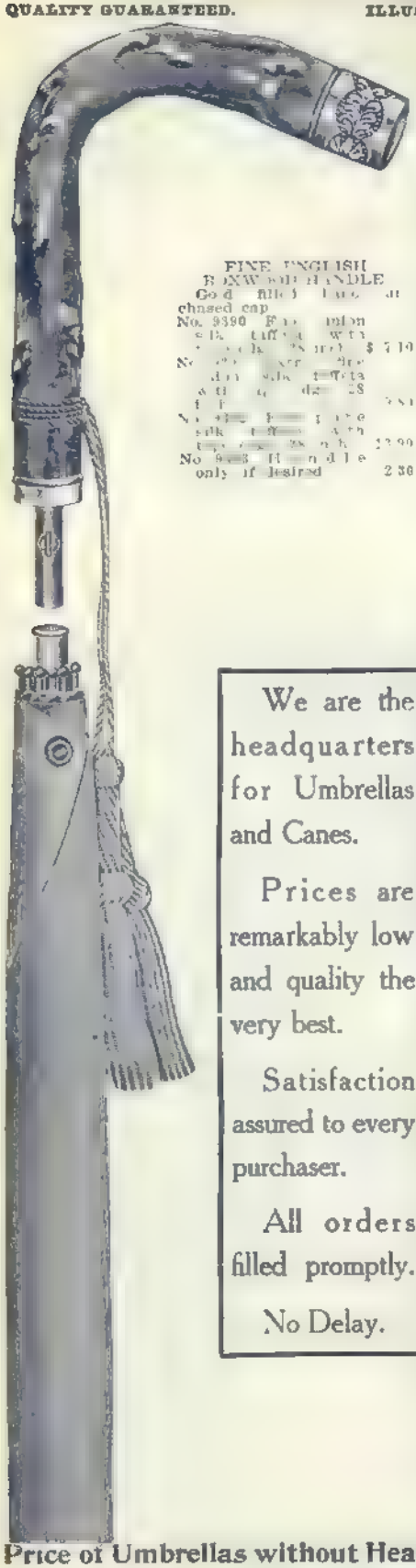
All umbrellas with steel rod with [illegible]

GENTLEMEN'S FINE BLACK SILK UMBRELLAS AND CANES

All come with Patent Detachable Handles--Simple and Reliable. Fitted with steel rods, silk cases, tassels, cords and tape edges.

QUALITY GUARANTEED. ILLUSTRATIONS OF HANDLE ARE ONE HALF SIZE.

PRICES EACH.



FINE ENGLISH BOXWOOD HANDLE

Gold filled [illegible] chased cap

No. 9390 Fine union silk taffeta with tape edge, 26 inch ... $ 7 10

No. [illegible] Extra fine union silk taffeta with tape edge, 28 inch ... 9 80

No. [illegible] Fine pure silk taffeta with tape edge, 28 inch ... 13 90

No. 9393 Handle only, if desired ... 2 30

FINE MISSION WOOD HANDLE

Sterling silver band [illegible] faceted cap

No. 9394 Fine union silk taffeta with tape edge, 26 inch ... $ 7 10

No. 9395 Extra fine union silk taffeta with tape edge, 28 inch ... 9 80

No. 9396 Fine pure silk taffeta with tape edge, 28 inch ... 13 90

No. 9397 Handle only, if desired ... 2 30

FINE MISSION WOOD HANDLE

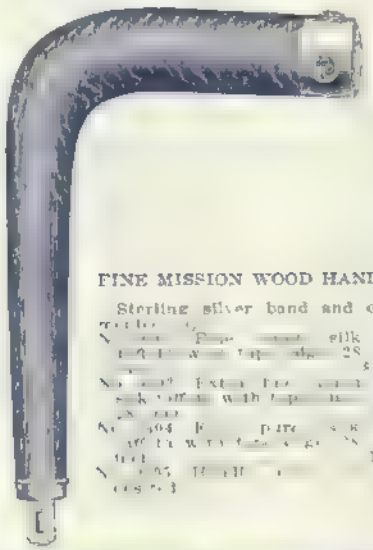
Sterling silver faceted cap and band

No. 9398 Fine union silk taffeta with tape edge, 26 inch ... $ 7 10

No. 9399 Extra fine union silk taffeta with tape edge, 28 inch ... 9 80

No. 9400 Fine pure silk taffeta with tape edge, 28 inch ... 13 90

No. 9401 Handle only, if desired ... 2 30



FINE MISSION WOOD HANDLE

Sterling silver band and ornamented [illegible]

No. [illegible] Fine [illegible] silk taffeta with tape edge, 26 inch ... $ 7 10

No. [illegible] Extra fine [illegible] silk taffeta with tape edge, 28 inch ... 9 80

No. [illegible] Fine pure silk taffeta with tape edge, 28 inch ... 13 90

No. [illegible] Handle only, if desired ... 2 30

FINE POLISHED CAPE HORN HANDLE

Sterling silver ca[illegible] cap

No. [illegible] Fine union silk taffeta with tape edge, 26 inch ... $ 8 90

No. 9407 Extra fine [illegible] silk taffeta with tape edge, 28 inch ... 11 60

No. 9408 Fine pure silk taffeta with tape edge, 28 inch ... 15 [illegible]

No. 9409 Cane to match ... [illegible]

No. 9410 Handle only, if desired ... 4 10

We are the headquarters for Umbrellas and Canes.

Prices are remarkably low and quality the very best.

Satisfaction assured to every purchaser.

All orders filled promptly.

No Delay.

FINE BUCK HORN HANDLE

Sterling silver ornamented cap and bands

No. 9411 Fine union silk taffeta with tape edge, 26 inch ... $ 8 90

No. 9412 Extra fine union silk taffeta with tape edge, 28 inch ... 11 60

No. 9413 Fine pure silk taffeta with tape edge, 28 inch ... [illegible]

No. 9414 Cane to match ... [illegible]

No. 9415 Handle only, if desired ... 4 10

DARK HIGHLY POLISHED IVORINE HANDLE

Sterling silver ornamented cap and bands

No. 9416 Fine union silk taffeta with tape edge, 26 inch ... $ 8 90

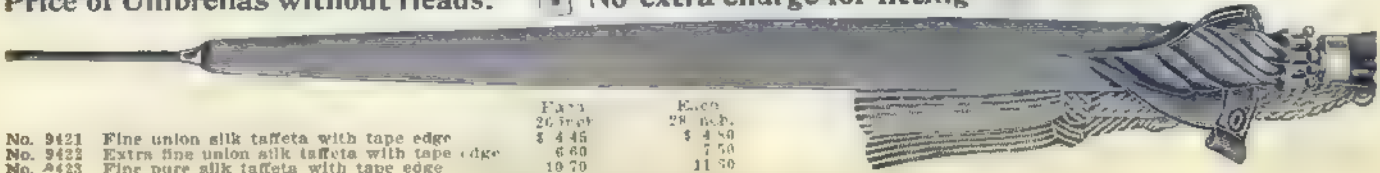
No. 9417 Extra fine union silk taffeta with tape edge, 28 inch ... 11 60

No. [illegible] Fine pure silk taffeta with tape edge, 28 inch ... 5 65

No. [illegible] Cane to match ... [illegible]

No. [illegible] Handle only, if desired ... 4 10

Price of Umbrellas without Heads. **No extra charge for fitting**



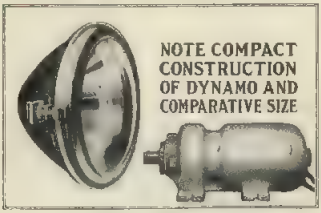
		Fits 26 inch	Fits 28 inch
No. 9421	Fine union silk taffeta with tape edge	$ 4 45	$ 4 80
No. 9422	Extra fine union silk taffeta with tape edge	6 60	7 50
No. 9423	Fine pure silk taffeta with tape edge	10 70	11 50

All Umbrellas come fitted with steel rod, silk case and tassel.

America's leading motor car manufacturers have adopted this electric system for 1913

GRAY & DAVIS

Lighting Dynamo System



The endorsement of the Gray & Davis System by the foremost engineers and manufacturers is, in itself, the highest possible tribute. It proves the claim that the GRAY & DAVIS System stands today, pre-eminent among the lighting systems of the world.

Demand Gray & Davis Dynamo and Electric Lamps on the car you purchase

GRAY & DAVIS, Inc. 55 Lansdowne Street BOSTON, MASS.

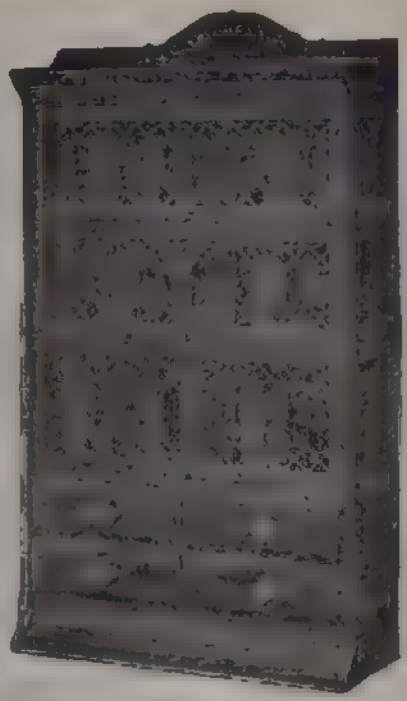
Manufacturers of Automobile Lamps, Dynamos and Electric Starters

GUNN SECTIONAL BOOK CASES

For Full Description and Illustrations of Special Features, see preceding page.

These Cases in Quartered Oak, can be furnished in Weathered Oak, Flemish Oak, Fumed Oak and other Finishes at same prices as for Golden Oak Finish. Cases are Shipped Knocked Down; Shipping Weight 23 Lbs. per Section

Leaded Glass gives a very Rich Effect



Fancy Top; Top Door Leaded Glass, Depth 10⅛ in.; Height of Bottom Section 13¼ in., Middle Section 11¼ in., Two Top Sections 9¼ in. Height Over-all 61½ in

	Each
No. 339-2A—Quartered Oak, Golden Oak Finish	$28.20
No. 339-2B—Birch, Imitation Mahogany Finish	[illegible]
No. 339-2C—Mahogany, Panelled Ends	36 50

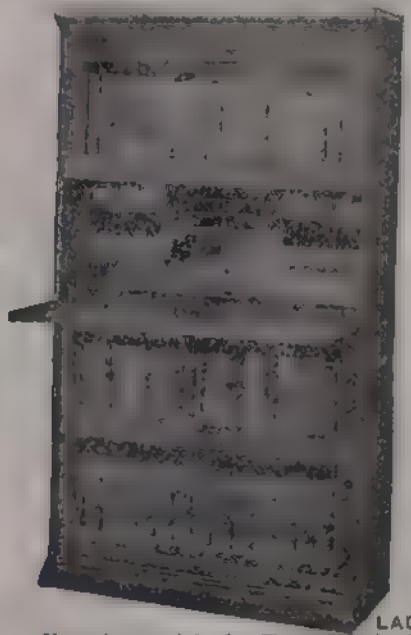
Shipping Weight 175 Lbs

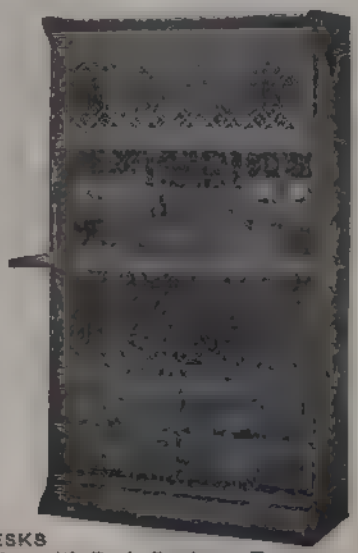
Fancy Top; All Doors Leaded Glass Four Drawer Bottom Section, Depth 10⅛ in.; Height of Bottom Section 11¼ in., Two Top Sections 9½ in.; Height Over-all 63½ in.

	Each
No. 339-2D—Quartered Oak, Golden Oak Finish	$37 95
No. 339-2E—Birch, Imitation Mahogany Finish	37.95
No. 339-2F—Mahogany, Panelled Ends	48 00

Shipping Weight 150 Lbs

DESKS AND CABINETS





LADIES' DESKS

Very Appropriate for Home Use in Combination with Book Sections; Easy access to all parts; Handsome in appearance and an Ornament to any room

THREE BOOK SECTIONS

Plain Glass Doors, Depth 10⅛ in., Height Bottom and Top Sections 11¼ in., Center Section 9¼ in.; Height Over-all 61½ in.

	Each
No. 339-2H—Quartered Oak, Golden Oak Finish	$32.80
No. 339-2K—Birch, Imitation Mahogany Finish	32.80
No. 339-2L—Solid Mahogany, (Light or Dark), Panelled Ends	43.00

Shipping Weight 150 Lbs.

FOUR DRAWER BOTTOM SECTION

Top and Center Doors, Leaded Glass, Depth 10⅛ in., Height of Book Sections 9¼ in.; 14⅞x10¼x4¾ in. Drawers; Height Over-all 59¾ in.

	Each
No. 339-2M—Quartered Oak, Golden Oak Finish	$42 95
No. 339-2N—Birch, Imitation Mahogany Finish	42 95
No. 339-2P—Solid Mahogany (Light or Dark), Panelled Ends	55 00

Shipping Weight 200 Lbs

ADJUSTABLE FILE CASES

Removable Partitions; a splendid Catalog File, or Storage for Disc Phonograph Records, etc.

Depth 10⅛ in., Height Bottom Section 13¼ in., Center Section 11¼ in., Two Top Sections 9¼ in.

	Each
No. 339-2R—Quartered Oak, Golden Oak Finish	$35 70

Shipping Weight 160 Lbs.

FILING CABINETS AND CARD SYSTEMS

CARD INDEX OUTFITS

WITHOUT COVER

Convenient for Desk Use; Holds any standard Cards. Each equipped with a 20 division A to Z Index and 100 Record Ruled Cards

Golden Oak

	Each
No. 335-O—Holds 150, 3x5 in. Cards...	$0.48
No. 446-O—Holds 200, 4x6 in. Cards...	.78
No. 558-O—Holds 400, 5x8 in. Cards...	1.50

Birch Mahogany

	Each
No. 335M—Holds 150, 3x5 in Cards....	$0.60
No. 446M—Holds 200, 4x6 in Cards....	.90
No. 558M—Holds 400, 5x8 in Cards....	1.65

Shipping Weight—Size 3x5 in., 2⅛ Lbs: 4x6 in., 4¾ Lbs.; 5x8 in., 9 Lbs. Each

WITH COVER

Holds any standard Cards; Each equipped with a 20 Division A to Z Index and 100 Record Ruled Cards

Golden Oak

	Each
No. 533-O—Holds 150, 3x5 in. Cards....	$0 72
No. 644-O—Holds 200, 4x6 in Cards....	1.10
No. 855-O—Holds 400, 5x8 in Cards....	1.70

Birch Mahogany

	Each
No. 533M—Holds 150, 3x5 in. Cards....	$0 85
No. 644M—Holds 200, 4x6 in. Cards....	1.20
No. 855M Holds 400, 5x8 in. Cards....	1 80

Shipping Weight—Size 3x5 in., 3 Lbs.; 4x6 in., 5 Lbs; 5x8 in., 9 Lbs. Each

WITHOUT COVER

With Follow Block and with Rubber Feet to prevent Scratching Desk; No. 935-O is equipped with 20 Division A to Z Index 12 Monthly and 31 Daily Guide Cards; No 946-O and No 958-O are equipped with 40 Division Alphabetical Guide Cards; 9 in. Long

Golden Oak Finish

	Each
No. 935-O—Holds 800, 3x5 in. Cards....	$1.00
No. 946-O—Holds 800, 4x6 in. Cards....	1.15
No. 958-O—Holds 800, 5x8 in. Cards....	1.60

Shipping Weight—3x5 in., 1¾ Lbs.; 4x6 in., 2⅝ Lbs.; 5x8 in., 3⅝ Lbs.

CARD INDEX TRAYS

With Follow Block and with Rubber Feet to prevent scratching Desk, No. 1335-O is equipped with 20 Division, A to Z Index, 12 Monthly and 31 Daily Guide Cards, No. 1346-O and 1358-O are equipped with 40 Division Alphabetical Guide Cards with Removable Covers, 13 in. Long

Golden Oak Finish

	Each
No. 1335-O—Holds 1200, 3x5 in. Cards..	$1 95
No 1346 O Holds 1200, 4x6 in Cards..	2.30
No. 1358-O Holds 1200, 5x8 in. Cards..	3.05

Weights—3x5 in., 3 Lbs; 4x6 in., 4 Lbs; 5x8 in., 5½ Lbs Each

Made of Heavy Tough Fiber Board, reinforced with strong Binders' Cloth, covered with Imported Agate Paper; Ends of Tray in Sole of Wood, No. 340G1 is equipped with 20 Division A to Z, 12 Monthly and 31 Daily Guide Cards, No. 340G2 and No 340G3 are equipped with 40 Division Alphabetical Guide Cards; with Removable Cover; 11 inches Long.

	Each
No. 340G1—Holds 1200, 3x5 in. Cards..	$0 75
No. 340G2—Holds 1200, 4x6 in. Cards..	95
No. 340G3—Holds 1200, 5x8 in. Cards..	1.40

Weight—3x5 in., 1½ Lbs; 4x6 in., 2¼ Lbs.; 5x8 in., 3 Lbs Each

TRANSFER CASES

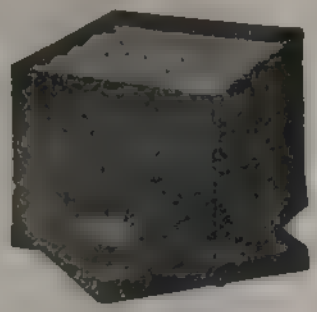
FIBER BOARD

Made of Heavy Fiber Board, re-enforced with strong Binder's Cloth at Corners, Covered with Imported Agate Paper; Each Case will accommodate the entire contents of one of the vertical File Drawers.

	Each
No. 920—Size 20 in. Deep, 12½ in. Wide, 10¼ in. High.....	$0.90

Shipped Knocked Down
Shipping Weight, 5 Lbs. per Dozen

VERTICAL LETTER FILES



FIBER BOARD

Files are made of Heavy Tough Fiber Board, reinforced with strong Binders' Cloth, covered with Imported Agate Paper; Complete with 40 Division A to Z Guide Cards and Adjustable Follow Block

	Each
No. 40—Size, Set up 16½ in. High 12 in. Wide, 11½ in. Long, Knocked Down 11½x12x2 in.....	$1 25

Weight 6 Lbs. Each

VERTICAL FILE FOLDERS

Made of Strong Manila Paper, Folded V Shaped, May be Lettered as desired, Convenient for Filing Letters, Vouchers, etc Heavy Weight

	Per 1000
No. 8003—Letter Size	$5 00
Weight 50 Lbs. per M	
No. 8013—Legal Cap Size.....	7.00
Weight 60 Lbs. per M	
No. 7003 Invoice Size	4 50
Weight 30 Lbs. per M	

PLAIN AND RULED CARDS

For Card Indexes

Size, In.	—Price per 1000— 3x5	4x6	5x8
No. 340M—Blank	$1.30	2.15	$3.60
No. 340M1—Record Ruled.	1.40	2.40	3.85
No. 340M2—Standard Ruled	1.40	2.40	3 85
No. 340M3—Price Ruled ..	1.40	2.40	3.85
No 340M4—Journal Ruled	1 40	2.40	3.85
No. 340M5—Ledger Ruled.	1 40	2.40	3.85
No. 340M6—Dbl. Vertical Ruled	1.40	2.40	

Put up in Boxes of 500 Each

GUIDE CARDS

Made of High Grade Index Board

No. 340N, Marked Days; No. 340N1, Marked Months; Nos. 340N2 to 340N7, Marked Alphabetically; No. 340N8, Blank

Nos.	No. in Set	—Price per Set— 3x5 in.	4x6 in.	5x8 in.
340N	31	$0.15	$0.23	$0.35
340N1	12	.08	.10	.13
340N2 ...	10	.06	10	.15
340N3	20	11	.17	25
340N4	25	13	.19	28
340N5	40	20	.28	44
340N6	80	.39	56	.88
340N7 ...	120	.58	84	1 32
340N8 ...	1000	3.60	5 20	8.50

When Ordering be sure to state Size

GUN OILS

3-IN-ONE

3-In-1, small, 1 oz. bottles, per dozen $1 60
large, 3 oz. bottles, per dozen . 3 60
3½ oz. cans, per dozen 3 00
8 oz. cans, factory size, per dozen. . . 6 00
One dozen in a box

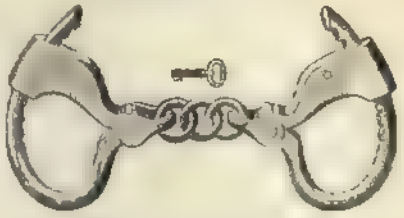
MANY-USE

Many-Use, 2 oz. bottles, per dozen $1 25
2 oz. reversible spout cans, per dozen. . . . 1 60
Ball bearing spout cans, per dozen . . . 4 00
One dozen in a box

TOWER'S PERFECT TWISTERS

No. 1. Tower's chain twisters, per dozen.....$12.00
Weight 3 ozs. The advantage of this twister is in the interlocking of the handles. When in use the two handles lay one within the other, closing automatically. They can be used instantly without care as to which side lays in the hand

HANDCUFFS

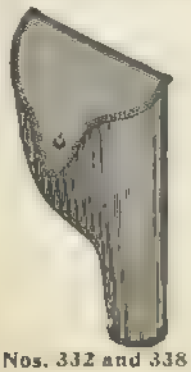


Tower's Double Lock

No. 11. Forged steel shackles, nickel plated, adjustable to any size, one lock is self locking, the other locks with key. One key unlocks both by turning twice around in the same direction, per pair..... $4 00

REVOLVER HOLSTERS

No. 132



Nos. 332 and 338

No. 132. .32 caliber, 3 and 3½ in., per dozen.....$3.00
No. 138. .38 caliber, 3¼ and 4 in., per dozen..... 4.00
No. 332. .32 caliber, 3 and 3½ in., per dozen..... 4.50
No. 332. .32 caliber, 5 and 6 in., per dozen..... 7.00
No. 338. .38 caliber, 3¼ and 4 in., per dozen..... 7.00
No. 338. .38 caliber, 5 and 6 in., per dozen..... 7.50

No. 532

No. 632

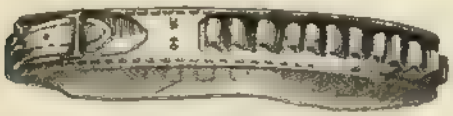
No. 532. .32 caliber, 3 and 3½ in., per dozen $6 50
No. 538. .38 caliber, 3¼ and 4 in., per dozen 7 0
No. 632. .32 caliber, 3 and 3½ in., per dozen. 8 5
No. 638. .38 caliber, 3¼ and 4 in., per dozen... 9 50

CANVAS AND LEATHER BELTS

No. 1. Shell belt, fine canvas double looping of the same, plain strap and buckle, per dozen $2 40

No. 5. Shell belt, heavy russet leather, embossed 2½ in wide, strap and nickel buckle stitched, per dozen $12 00

CARTRIDGE BELTS



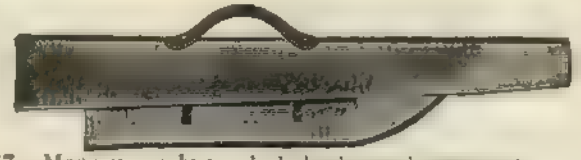
No. 7. Cartridge belt russet leather, embossed 1 in
No. 5. Shell belt heavy russet leather embossed 2½ in.

No. 3. Shell belt, heavy brown razor strop web 2 in wide, loops and sling of narrow web to match. Lined with patent adjustable nickel clasps per dozen $6 00

No. 4X. Shell belt russet leather embossed 2 in wide leather loops and sling, strap and buckle, per dozen $9 00

GUN COVERS

No. 55. Light weight tan duck flat end, pegamoid binding, per dozen.....$6.00



No. 57. Medium weight tan duck leather end pegamoid binding, outside rod pocket with two straps for Winchester take down shot gun 26 and 30 in., per dozen $9.00

Outside rod pocket heavy grain leather, protection over lock and muzzle

No. 59. Light weight tan duck leather end, pegamoid binding . . . .per dozen, $10.80
No. 60. Heavy weight tan duck leather end, brass buckles, heavy canvas binding, edges turned in, stitched handle and end . . . .per dozen, 13.20

For Winchester or Double Barrel Guns

Outside rod pocket, heavy grain leather protection over lock and muzzle.

No. 61C. Heavy waterproof grey covert cloth flanket lining leather end pegamoid bound . . . . . per dozen $12 00

STREET LAMPS

HAM'S GLOBE

Cold Blast

No. 9 Cold blast burner
No. 9 globe
1½ in. "D" wick.

Gives a large, steady, brilliant and unfailing light. Fitted with automatic extinguisher, which can be set to burn 4, 8, 12, 16, 20 or 24 hours. Finished in green enamel.

No. 9. Globe street lamp, each.....$5 00

One in a case

HAM'S TUBULAR SQUARE

No Chimney

No. 10 burner
1½ in. "D" wick

This lamp gives an immense light and burns steadily in the strongest winds. Has outside wick regulator and automatic extinguisher.

***No. 10.** Square tubular street lamp, each.....$12 00

One in a case

*Not carried in stock

HANGING LAMPS

Cold Blast

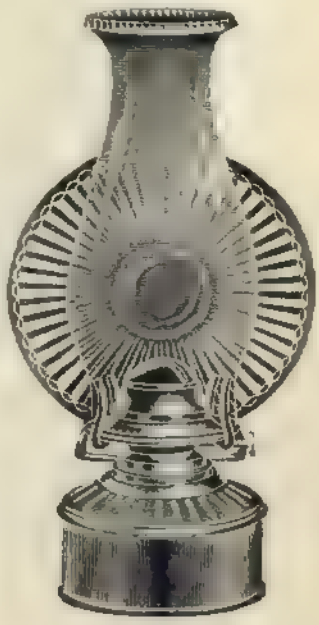
No. 9 Cold blast burner.
No. 9 Cold blast globe.
1½ in. "D" wick.

Gives a large steady brilliant and unfailing light. Fitted with automatic extinguisher, which can be set to burn 4, 8, 12, 16, 20 or 24 hours. Finished in green enamel.

No. 9. Hanging lamp, each.....$5.50

One in a case

WALL LAMPS



Virginia Safety

Virginia. Wall lamps, half dozen in a box, per dozen..$6 00
Wall lamps, one dozen in a box, per dozen 5 50

Solid drawn metal bowl with corrugated top. Frame is made of heavy wire. The reflector may be turned in any direction. Decorated in assorted colors, red and blue. Complete with burner and chimney.

GASOLINE LAMPS

THE AIR-O-LITE

RAG MANTLES

Rag mantles
per dozen ...$..

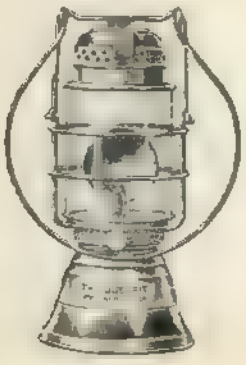
The Air-o-Lite lamp makes and burns its own gas
Safe
Brilliant
Economical
Lasting

Air-o-Lite gasoline lamps, each.....$8.00

These lamps burn gasoline and are safer than the oil lamp. Produces five times the light of a [illegible] oil lamp at one third the cost. [illegible] filling, good for 24 hours. It is practically indestructible. Produces no smoke, no smell, no dirty chimney, no wick to trim. By air pressure the gasoline feeds from the [illegible] of fount up through the lamp standard to the generator, where it is changed into vapor, so that the substance burned is composed of vapor and air

ACETYLENE LANTERNS

JUSTRITE



No. 10. With automatic generator, giving perfect control of the gas, each.....$3 50

JUSTRITE LAMPS

SUPERINTENDENT AND CAMPERS' LAMP

No. 100. Burns carbide and water, gives 15 c. p. light, each.....$1 50

Height 4 in., weight 5½ ounces. Burns 4 hours on one charge.

Nickel plated, highly polished with adjustable reflector head, extra carbide container, extra gasket, extra felt and two burner tips.

Absolutely safe. Equipped with folding handles and strong brass hook. Can be carried or hooked in the cap, pocket or belt. Does not smoke, and is free from grease and dirt.

The light that is just right for lighting the camp, hunting, fishing, boating, canoeing, and driving at night.

Also handy around the house and wherever a portable light is desired.

Packed in a strong, lock cornered, wood box with an extra carbide container and extra repair parts. Every lamp is carefully tested at the factory and is guaranteed to be perfect in workmanship and material.

Packed in strong wood box.

JUSTRITE MINERS' LAMP

No. 99. [illegible] brass, each.....$1.00
No. 88. [illegible] nickel plated.....1.25

This is a clean, safe lamp. Has permanent German silver reflector. Gives a strong, steady light. Burns from 3½ to 4 hours. Extra carbide container with each lamp.

One in a box

Justrite lamps are constructed on scientific principles—only the very best materials and workmanship being used. They are original in design and different in shape from any other carbide lamps with just the right proportions and weight.

They are made in two parts, water reservoir and carbide container—drawn from seamless brass. Every lamp is guaranteed perfect in material and workmanship.

One fourth or one half inches of carbide should be used.

HAND POWER ELEVATORS

General Description of Various Parts

One Cast Iron Hand Rope Wheel with Brake Pulley attached. One Cast Iron Gear and Pinion all accurately Lathe Bored and securely keyed to Shafts. Shafts are Cold Rolled Steel, operating on Anti Friction Roller Bearings. The Drums, usually 2 in number, are made up of Cast Iron Heads, fitted with Maplewood Centers, grooved for perfect travel of Cables.

The Brake is Positive in action and can be noiselessly operated from the Platform, or any floor. Every Car is equipped with the "Union" Safety System, which throws the Dogs in contact with Guide Stripe in case of breakage of Cables, thus preventing the fall of the Car.

Cars have Hard Pine Bottoms, bolted to Angle Iron at the sides, and covered with Maple Flooring.

No. 1—CENTER LIFT

For Use in Warehouses, Stores, Factories, etc.

Furnished with three Cables (two for Hoisting and one for Counter-Balance, of Best Annealed Swedish Iron, 6 Strands with 19 Wires to each Strand, the Hand or Pulling Rope is Pure Manila of Large Diameter.

No. 3—CARRIAGE LIFT

For Lifting Buggies, Carriages, Wagons, Automobiles, Farm Implements, Machinery, etc.

Furnished with five Cables four for Hoisting and one for Counter Balance Weight) of Best Annealed Swedish Iron, 6 Strands with 19 Wires to each the Hand or Pulling Rope is Pure Manila of Large Diameter.

Prices F. O. B. Factory, near Chicago
Prices are for Travel Up To 20 Feet: For Travel Over 20 ft., Prices on Application
In Ordering give Maximum Load to be lifted and State the Traveling Distance

Size of Car, Ft.	Capacity	Each
4 x4	1000 Lbs.	$157.50
4 x5	1500 Lbs.	162.00
5 x5	1500 Lbs.	165.00
4½x6½	1500 Lbs.	165.00
3½x8	1500 Lbs.	165.00
5 x6	2000 Lbs.	170.25
6 x6	2000 Lbs.	177.00
6 x7	2000 Lbs.	180.00
6 x8	2000 Lbs.	183.00
6 x6	2500 Lbs.	195.00
6 x7	2500 Lbs.	199.50
6 x8	2500 Lbs.	202.50

Size of Car, Ft.	Capacity	Each
5 x 6	2000 Lbs	$18[illegible] 00
6 x10	2000 Lbs	202 50
7 x10	2000 Lbs	210 00
6 x 8	2500 Lbs.	19[illegible] 00
7 x 9	2500 Lbs.	21[illegible] 00
6 x10	2500 Lbs.	215 00
7 x10	2500 Lbs.	217 50
8 x12	2500 Lbs.	217 50
7 x12	2500 Lbs	22[illegible] 00
8½x12½	2500 Lbs.	21[illegible] 50
8 x16	4000 Lbs.	35[illegible] 00
8 x18	4000 Lbs.	37[illegible] 00

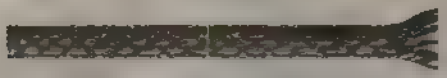
Average Shipping Weight from 2000 to 3000 Lbs.

Above Prices include Counter Weight of 100 Lbs in excess of Weight of Car, and are for Complete Outfits, excepting timbers. These can be picked up from your local dealer, thereby **saving freight;** Blue Prints showing full details as to erection furnished with each Elevator.

Directions for Measurements

Send Sketch showing height of each story from floor to floor travel of Elevator and in top story the height from floor to ceiling, where Overhead Machinery is located. The Floor Opening must be 12 in wider postway than you want the car in the clear and 2 in larger front to back. The minimum head room required for Overhead Machinery of Hand Power Elevator is 11 ft.

SASH CORD



Size No. 6, Diameter 7/32 In.
Weighs about 18 Lbs. per Dozen, or 66 ft. per Lb.; Suitable for Sash Weights up to 10 Lbs.

Size No. 7, Diameter 1/4 In.
Weighs about 23 Lbs. per Dozen, or 52 Ft. per Lb.; Suitable for Sash Weights 10 to 15 Lbs.

Size No. 8, Diameter 1/4 In.
Weighs about 27 Lbs. per Doz., or 44 Ft per Lb. Suitable for Sash Weights 15 to 35 Lbs.

Size No. 10, Diameter 5/16 In.
Weighs about 44 Lbs. per Dos., or 27 Ft. per Lb. Suitable for Sash Weights 35 to 45 Lbs

Size No. 12, Diameter 3/8 In.
Weighs about 60 Lbs. per Dozen, or 20 ft. per Lb., Suitable for Sash Weights over 45 Lbs., Dumb Waiters, Elevator Gates, Electric Street Lights, etc

No. 180A—RELIABLE WHITE COTTON, Hard Laid

Size, Nos.	6	7	8	10	12
Diam., In	7/32	1/4	9/32	5/16	3/8
Per Pound	$0.70	.65	.60	.60	.60

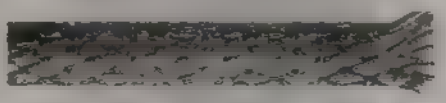
100 Feet in a Hank, One Dozen Hanks in a Bundle

No. 180B—SAMSON SPOT CORD
Hard Braided, White Cotton

Per Pound
Size No. 7—7/32 In., for 5 to 12 Lb. Wts.; Wt. 22 Lbs. Doz....$0.80
Size No. 8—1/4 In., for 12 to 20 Lb. Wts.; Wt. 27 Lbs. Doz.... .75
Size No. 9—9/32 In., for 25 to 35 Lb. Wts.; Wt. 33 Lbs. Doz.... .75

An Extra Quality of Cotton, Guaranteed by Manufacturers to be free from bad splices or rough braiding. Trade-marked with Colored Spots in Braid

Sash Cord Numbers are the Diameter in 32nds inches; thus No. 8 is 8-32, or 1/4 in.
All Sash Cord 100 Feet in a Hank, Two Hanks Connected, One Dozen in a Package



No. 180C—SILVER LAKE

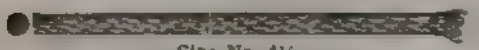
White Cotton, Hard Laid

Size Nos.	6	7	8	10
For Weight, Lbs.	Up to 10	10 to 15	15 to 35	35 to 45
No. ft. per Lb.	66	52	44	27
Diameter, In.	7/32	1/4	9/32	5/16
Weight Doz. Hanks, Lbs.	18	23	27	30
Per Pound	$0.75	.70	.65	.65

Made of fine yarn, free from waste, perfectly braided and smoothly finished. Stamped "Silver Lake" every three feet.

SMALL LINES

Size No. 4



Size No. 4½

Size No. 5

Size Nos. 4 and 4½ are adapted for Mason's Lines, Upholsterer's Cord, Curtain and Shade Cord, etc., Size No 5 is suitable for Awning Lines, Ventilator Cord, etc.

No. 180F—WHITE COTTON

Size Nos.	4	4½	5
Diameter, In.	1/4	9/32	5/16
Per Dozen	$2 00	2 50	7 50

No. 180F2—DRAB COTTON

Size Nos.	4	4½	5
Diameter, In	1/4	9/32	5/16
Per Dozen	$2.25	2.75	3.50

Size Nos. 4 and 4½ put up in Hanks of 48 ft., One Dozen Hanks in a Box; Size No. 5, 100 ft. in a Hank, One Dozen in a Package

SASH CHAINS

COPPERED STEEL

Chain never rots nor frays, and is almost everlasting

Per 100 Feet
No. 180H—For Sash not Over 80 Lbs.; Wt. 6 Lbs. per 100 Ft..$6 00
No. 180K—For Sash not Over 130 Lbs.; Wt. 7 Lbs. per 100 Ft.. 8.00
500 Feet on a Reel

GALVANIZED STEEL

Per 100 Feet
No. 180HG—For Sash not Over 80 Lbs.; Wt. 6 Lbs. per 100 feet $6 50
No. 180KG—For Sash not Over 130 Lbs.; Wt. 7 Lbs. per 100 feet 8.50
500 Feet on a Reel

SASH CORD IRONS OR FASTENERS

Actual Size
Front View Open

Per Gross
No. 180M1—Wrought Steel Anchoring Attachment for Fastening Cord and Weight to Sash.....$1.00
One Gross in a Box Weight 2¼ Lbs. per Gross

SASH WEIGHT FASTENERS FOR CORD

Actual Size Open

Per Gross
No. 180N1—Wrought Steel Clamp, Requiring no Knot in Cord, to Securely Hold Weight.....$1.00
One Gross in a Box; Weight 1 Lb. per Gross

Per Set
No. 180L—Attachments for both Sash and Weight, for One Window of 2 Sashes; Four of each in a Set.....$0 20

FLY TRAPS

HARPER'S

SANITARY

JIM DANDY

Harper's Fly Trap, painted wire, stained wood base, per dozen .....$

One dozen in a box

Jumbo Sanitary Fly Traps

With galvanized screen, per dozen.....$12 00
With copper screen, per dozen..... 16 00

Height 12½ in., diameter of funnel 8 in. Held rigid by four ¼ in. iron rods. Cannot get out. Escape [illegible] bottom galvanized iron. Bands painted [illegible] green. The dead flies can be removed without letting [illegible] escape. A sanitary, easily cleaned trap.

One-quarter dozen in a box

Jim Dandy, diameter 11 in., height 20 in., cone 10 in. high, per dozen $12.00

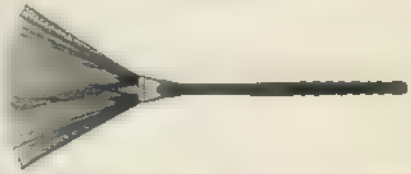
Made [illegible] nicely grained chestnut, stained a rich oak finish. Packed knocked down.

One-half dozen in a carton

FLY SWATTERS

Y. R.

OSBORN'S



SWAT-STICKA

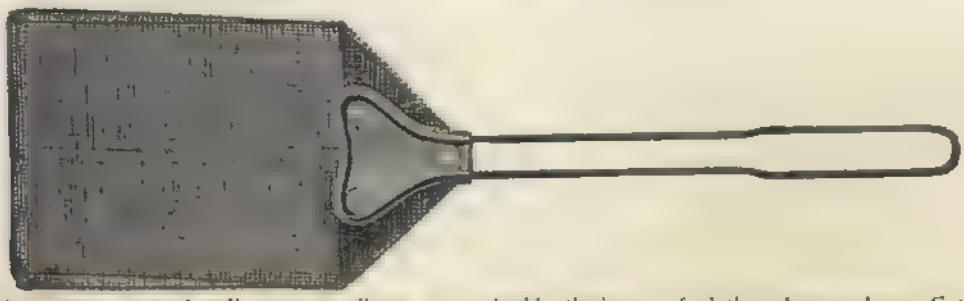
No. 10YR. Fan shaped wire firmly held in shape by patent sewing, enameled wood handle, sanitary and convenient... .....per dozen, $1.25

One dozen in a box, four display stands with each gross

Osborn, made of tempered steel wire with enameled handle. It is a very durable and lasting swatter. A neat display stand is furnished with each dozen ..... per dozen, $2.00

Swat-Sticka. Woven wire, size 4¾x8 in., entire length 16¾ in., stained wood handle. The weave is secured at sides by a double fold and at end with a three-wire selvage ..... per dozen, $0 80

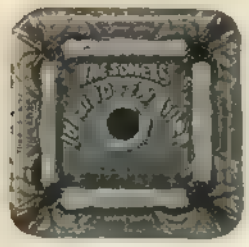
One dozen in a box



Shurkil, length 16 in., strong wire handle, wire is all one piece, double thickness of cloth, selvage edges. Cut edges are gathered and eyeletted under shield.....per dozen, $.....

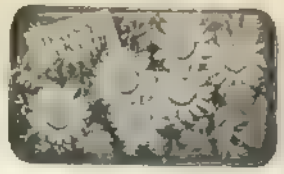
Two dozen in a box

FLY KILLERS



Ideal Fly Killers, per dozen.....$1 20

Can be placed anywhere; attracts and kills all flies. Neat and ornamented. Made of metal, is clean and sanitary. To use, remove plug and fill with water, press top and bottom together until liquid appears on the wick



Daisy Fly Killer, per dozen.....$1.25

Is a tightly sealed, prettily ornamented metal box provided with five holes and contains a fly killing material When filled with water, and is thoroughly shaken, the material inside mixes with the water, is absorbed through the wicks and the flies, getting a taste of it, will soon die. The fly killing material inside is sufficient to last through the whole season

CORN POPPERS

Made of a good quality steel wire square, wire braced, wire lid.

No. 1. One quart size, per dozen. $1 50
No. 7. Two quart size, per dozen..... 2 75

Troy. Size 3½x7½x9½ in long made of polished steel per dozen $3 00

A wire slides over the handle to manipulate the cover, which is perforated to sift out the unpopped grains

One dozen, nested in a fibre board box

SIEVES

WOOD RIM

Meshes	14	16	18
Per dozen	$1.15	1.20	1.30

Assorted 16 and 18 mesh, per dozen..... $1.20

One dozen in a bundle

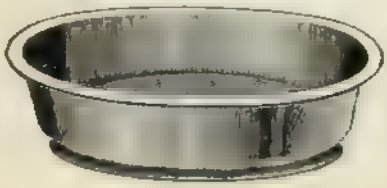
CHAMPION

Seamless

No. 1. 10 in. in diameter, per dozen . ..$1.20
No. 2. 12⅜ in. in diameter, per dozen. . 1.80

One dozen in a box

METALLIC SEAMLESS, FLOUR

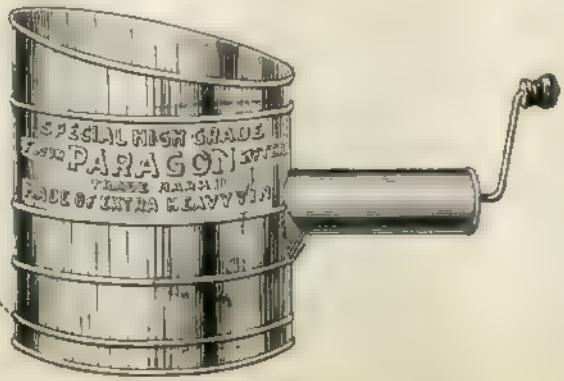


Diameter 12⅜ in

No. 316. 16 mesh, plain wire, per dozen . .. $1 40
No. 318. 18 mesh, plain wire, per dozen . . 1 60
Assorted 16 and 18 mesh, per dozen..... . 3 00

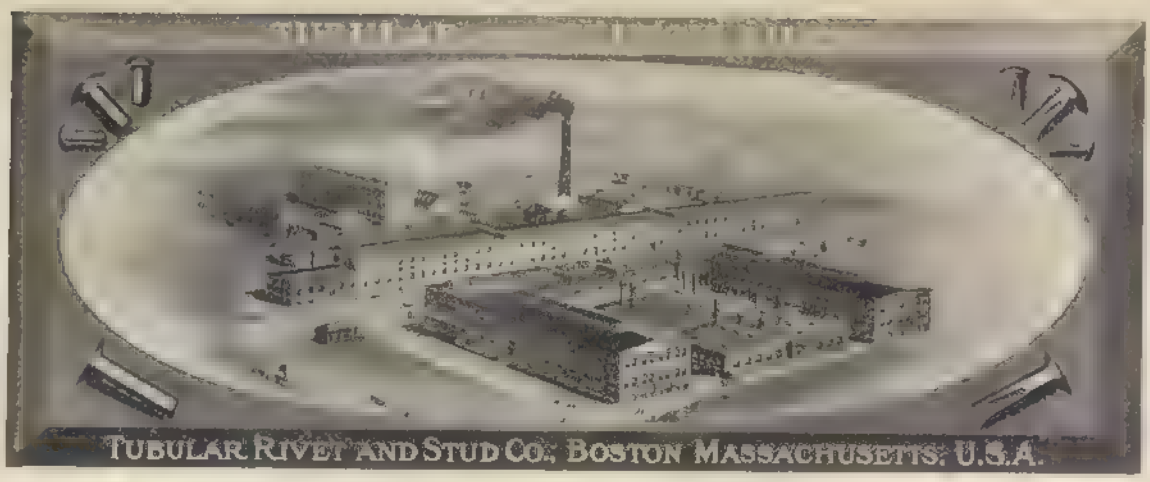
One dozen in a box

HUNTER'S SIFTERS



Paragon rotary flour sifter, made of heavy tin, per dozen..... $3 00

One dozen in a box



KNOW WHERE TO BUY

No Hardware Buyer Who Has Used

HENDRICKS' COMMERCIAL REGISTER would think of doing without it. When he wants to order some specialty he turns to that one of the 35,000 classified headings and finds all the makers listed with the trade names opposite each.

Is that worth anything to you? Circular on request

D. WILLIAMS CO. - - - 239 West 39th St., N. Y.

Established 1875 — Incorporated 1903

STRAP and TEE HINGES and HINGE HASPS
Iron and Steel CUT NAILS

All Products made from NEW MATERIAL rolled for the purpose

Quality Guaranteed F. A. GODCHARLES COMPANY, MILTON, PA.

"HENDRYX"
BIRD CAGES

No. 99 Japanned

No. 231 White and Gold.

No. 5004 Brass

No. 5[illegible] Japanned

In the manufacture of bird cages "HENDRYX" leads—other manufacturers follow. The best spring brass wire is used—giving unequalled strength, firmness and lightness. Self-closing and fastening doors on all our brass cages. Send for Catalogue No. 10.

THE ANDREW B. HENDRYX CO., 80 Audubon Street, New Haven, Conn.

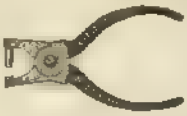
Walworth Makes it!

STILLSON WRENCH
Genuine
Has the Diamond Trade Mark

WALWORTH MFG. CO.
BOSTON, U. S. A.
Tool Dept.

Be sure you get it!

EYELET-TOOL CO.
NEEDLE POINT PERFORATORS



Manufacturers of Punches and Sets (Hand, Drive and Foot Power) for Leather, Cloth and Metal, Punch Tubes. All kinds and sizes made to order. Write jobber. Booklets free. Established 1858
40 Lincoln Street, Boston, Mass.

"VICTOR" BOLT CLIPPER

4 Sizes
Send for Catalogue
ROBERTS MFG. CO. Somerville Station, BOSTON, MASS., U. S. A.

An Auger Bit You Can Depend On
for fast, smooth work in every kind of wood and under all conditions—THE FORD.
The FORD twist saves the Wrist and saves dollars in time and labor. WORKMEN WHO KNOW prefer the FORD every time. Honestly made and sold with a solid guarantee. Write for free catalog "G."
FORD AUGER BIT COMPANY, Holyoke, Mass.

Taps, Dies and Screw Cutting Assortments
Wells Brothers Company
Greenfield, Mass., U. S. A.
Send for No. 30 Catalog

OVERSTOCKED?
If you have to say "Yes," there's a remedy—"The Stock Exchange" Column of Iron Age-Hardware's "Opportunity Exchange."
Ask us how this department can help you unload.
IRON AGE-HARDWARE
239 West 39th St., New York

LIGHTNING and GREEN RIVER BRANDS
WILEY & RUSSELL MFG. CO.
Greenfield, Mass., U. S. A.

TAPS, SCREW PLATES
Stocks, Dies, Reamers; Bolt Cutters, Blacksmiths' and Machinists' Tools.
SEND FOR CATALOG 35A

Quicker Than You'd Expect
Witherby Tools are delivered to you before you ever expect them.
That's a factor to be considered in placing your order—you get what you pay for and get it soon.
Chisels—Gouges—Drawing Knives
WINSTED EDGE TOOL WORKS, Winsted, Conn.

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Use this department whenever you are looking for the name of a manufacturer. It is a convenience and a time-saver

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offers its services in selecting and supplying technical and industrial books to our readers.
239 W. 39th St. - - New York

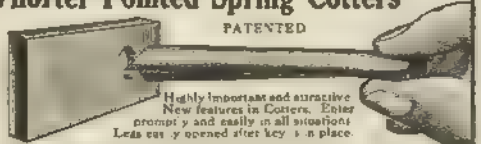
EAGLE LOCK CO.
TERRYVILLE, CONN.
185 Chambers Street, New York; 511 Commerce Street, Philadelphia; 110 Lake Street, Chicago.
MANUFACTURERS
CABINET LOCKS TRUNK LOCKS PADLOCKS
NIGHT LATCHES WOOD SCREWS

PUNCHED AND FLARED
BLACK HOOPS GALVANIZED
Packed in display boxes, 25 and 50 each. If your jobber cannot supply you write
Oatman's Hardware (L. Oatman, Proprietor) Medina, O.

High Grade Hand Made STEEL ALPHABETS and FIGURES
THE SCHWERDTLE STAMP
Bridgeport, Conn.

TACKS SMALL CUT **NAILS** CARRIAGE **BOLTS**
Cobblers' Nails, Bed Screws, Glazier Points
SHELTON CO. (Estab. 1836) Shelton, Conn. New York, 187 Chambers St.

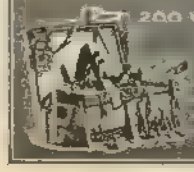
McWhorter Pointed Spring Cotters
PATENTED
Write for full information



Highly important and attractive New features in Cotters. Enter promptly and easily in all situations. Less easily opened after key is in place.
McWHORTER MFG. COMPANY, Riverton, N. J.

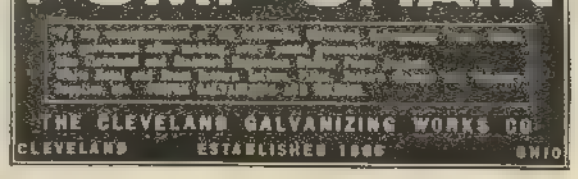
WE WANT YOUR INQUIRY
HIGH REX GRADE
THE REX FILE & SAW CO., NEWCOMERSTOWN, OHIO

AMERICAN TOOL CHEST CO
FACTORY AND SALESROOM
200 WEST HOUSTON ST NEW YORK U.S.A.



WITH TOOLS FOR BOYS, YOUTHS, GENTLEMEN FARMERS, RAILROADS AND CARPENTERS USE. ALSO TOOL CABINETS, MACHINISTS AND PIPE FITTERS, EMPTY TOOL CHESTS, AGENTS FOR STEEL TOOL CHESTS.
SEND FOR LATEST CATALOGUE.

PUMP CHAIN



THE CLEVELAND GALVANIZING WORKS CO.
CLEVELAND ESTABLISHED 1865 OHIO

HOSE PIPES

In ordering 2 and 2½ in. Pipes with Special Hose Thread, send Sample of Coupling to be Matched

With Swivel Handle, Screw Tip, Hose Threads

The Swivel Handle conforms to the position of the Pipeman, without cramping the arm, and allows the Pipe to rotate when the water is forced through it, without wrenching it from his grasp

Made in conformity with the requirements of the Inspection Department of the Associated Factory Mutual Fire Insurance Companies

SWIVEL HANDLE PLAY PIPES

Size Hose, In.	2	2½	2½
Length, In.	20	24	30
Size at End of Taper, In.	1¼	1¾	1¾
Size at End of Nozzle, In.	⅞	1	1
Weight Each, Lbs.	6	7	8
No. 15 Wound and Painted, Each	$9 00	11.00	....
No. 16 Plain Brass, Each	7 50	9 50	11 00

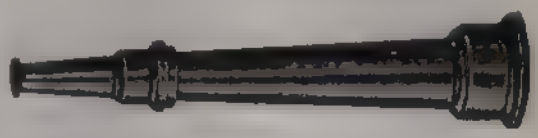
No. 15 is Marlin Wound and Painted Red; for the 2½x30 in., use the Underwriter Pipe

UNDERWRITER PIPES

Each

No. 20—For 2½ in. Hose; Length 30 in.; Marlin Wound and Painted Red, Size at End of Taper 1¾ in., at End of Nozzle 1 in..... $8 00

Weight 8 Lbs. Each



PLAIN BRASS, SCREW TIP, NO HANDLE

No. 601—With Cock, Iron Pipe Threads

No. 602—With Cock, Hose Pipe Threads

Size Hose, In.	¾	1	1¼	1½	2	2½
Length, In.	8	8	12	12	15	20
Wt. per Doz., Lbs.	10	15	30	30	51	141
Iron Pipe, per Doz.	$14 20	18 00	43 00	60 00	113 00	170 00
Hose Pipe, per Doz.	....	....	40 00	55 00	110 00	160 00

No. 611 Without Cock, Iron Pipe Threads

No. 612—Without Cock, Hose Pipe Threads

Size Hose, In.	¾	1	1¼	1½	2	2½
Length, In.	7½	8½	12	13	15	20
Size at End, In.	½	⅝	¾	⅞	1	1⅛
Wt. per Doz. Lbs.	11½	9	18	26	36	69
Iron Pipe, per Doz.	$9 20	11 20	21 20	27 50	48 00	99 50
Hose Pipe, per Doz.	....	....	20 00	25 00	45 00	96 00

HOSE NOZZLES

FIRE DEPARTMENT HOSE PIPE

With Shut-off

Wound and Painted with Two Leather Handles and Swivel Base and Top.

SHUT-OFF NOZZLES

For use with Fire Department or other Pipes. In combination with the Hose Pipe it is the best fire fighter known. Highly Finished.

Each

No. 30—2½x15 in.; can be used with or without Shut-off..... $30 00

Weight 10 Lbs. Each

Each

No. 25—Length 7 in... $15 00

Weight 4¾ Lbs. Each

PLAIN BRASS

No. 621—To Screw, Iron Pipe Threads

No. 622 To Screw, Hose Pipe Threads

Size Hose, In.	¾	1	1	1¼	1¼	1½	1½	2	2	2½	2½
Length, In.	3	4	6	6¾	12	5¾	12	6¾	12	7½	12
Wt. per Doz. Lbs.	4	5⅝	8	0	10½	6¾	12	15	20	21	28
Iron Pipe, Dz.	$6 00	6 25	10 00	13 75	19.75	18 75	24 00	28 00	39 00	39 50	50 00
Hose Pipe, Dz.			9 00	13 00	18 50	18 00	22 00	26 00	36 00	37 50	48 00

No. 633—To Wind

Size Hose, In.	¾	1
Length, In.	5½	6
Wt. Dozen, Lbs.	3	6
Per Dozen	$4 00	5.00

HOSE FITTINGS

AUTOMATIC COUPLINGS

In ordering, give exact Outside Diam. of Hose and also the kind of Hose, send Sample if possible. We can furnish a Sample Thread for which to cut Couplings, unless it is Iron Pipe or Hose Pipe Thread.

No. 61—Iron Pipe Threads

No. 62—Hose Pipe Threads

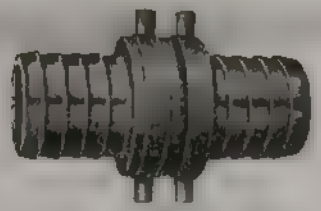
For use on Cotton Mill and Fire Hose, made of Cast Brass, Polished, gives smooth waterway and finished appearance, is the only coupling that can be attached to a Fabric Hose, as their Walls are too thin to tighten an ordinary clamp sufficiently.

Size Hose, In.	1¼	1½	2	2½
Wt. Each, Lbs.	2	2	3½	5¼
Each	$2 00	2.00	2 50	3 00

INSIDE DIAM. OF TAIL-PIECE IN.

Unlined Linen	1 1/16	1¾	2 3/16	2¼
Cotton, Rubber Lined Mill	1⅛	2⅜	2¾	
Double Jacket, Fire				3 5/16

Two Expansion Rings and Rubber Washer included with each Coupling



WATER HOSE COUPLINGS, Cast Brass

No. 71—Iron Pipe Threads

No. 72—Hose Pipe Threads

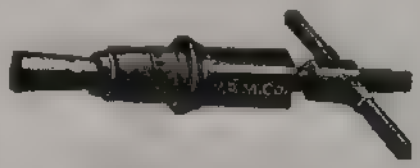
Size Hose, In.	1	1¼	1½	2	2½
Weight per Doz., Lbs.	4¾	9½	12¼	24	36
Iron Pipe Thread, per Doz.	$4 65	10 50	15 00	26 00	50 00
Hose Pipe Thread, per Doz.	4 40	10 00	14 00	24 00	48 00

Open Stock

No. 96—ROCK DRILL COUPLINGS

Made of Malleable Iron and Composition Gun Metal. These Couplings are intended for Rough Quarry Work and are made especially heavy to withstand knocking about and hardest use.

Size Hose, In.	¾	1	1¼
Wt. Each, Lbs.	2	2¾	3¾
Each	$4 00	5 00	6.50



No. 1—AUTOMATIC COUPLING EXPANDERS

Is held in an ordinary bench vise during the entire operation; simple and easily operated. Made of Iron, Natural Finish.

Size In	1¼	1½	2	2½
Length In	10	13	15	18
Weight Each, Lbs.	6	8	11	19
Each	$15.00	15.00	15.00	15.00

Open Stock

SHERMAN HOSE CLAMPS

In Ordering Clamps state Size and Ply of Hose and give our Number.

Made of Steel Brass, will not rust or corrode, Lighter, Stronger and more pliable than Cast Brass. The Tongue of the Clamp prevents the Hose from slipping and holding at this point.

No. 34—For 3 and 4 Ply Water Hose

Size Hose, In.	¾	1	1	1¼	1¼	1½	1½	2	2½	2½
Ply Hose	4	3	4	3	4	3	4	4	4	4
Diam. Open, In.	1¾	1 7/16	1 7/16	1 7/16	1 11/16	1 11/16	2 1/16	2 5/16	2 5/16	3 1/16
Wt. Doz., Lbs.	¾	1½	1½	1¾	2	2¾	2½	3½	4	4¼
Cross in Dia.	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
Per Dozen	$2 00	2.00	2 00	2 50	2 50	3 00	3 00	4 00	6 50	7 00

No. 35—For 3, 4 and 5 Ply Steam Hose

Size Hose, In.	1	1¼	1½	1½	2
Ply Hose	3	4	4	5	4
Diam. Open, In.	1 5/16	1 13/16	2 5/16	2 5/16	2 13/16
Wt. Doz., Lbs.	1¾	2¼	2½	3	3⅜
Cross in Dia.	1/4	1/4	1/4	1/4	1/4
Per Dozen	2 50	3.00	3 50	4 00	5 50

The above assortment of Clamps will fit all sizes and plies of Steam and Water Hose from ¾ to 2½ inches; also Cotton Rubber Lined Mill Hose.

SURE GRIP HOSE CLAMPS

In ordering Clamps state Size and Ply of Hose, and give our Number.

Made of Galvanized Steel, demonstrated to be especially well fitted for a Strong, Light and Pliable Hose Clamp. The construction offers a true inner circle both before and after tightening. It will not leak.

No. 134—For 3 and 4 Ply Hydrant Hose

Size Hose, In.	1	1	1¼	1¼	1½	1½	2	2½	2½	3
Ply Hose	3	4	3	4	3	4	4	4	4	4
Diam. Open, In.	1 3/16	1 7/16	1 11/16	1 11/16	2	2 1/16	2 5/16	2 11/16	3	3 5/16
Wt. Doz., Lbs.	1	1	1½	1½	1¾	1¾	3 3/16	4	4	5
Dozen in Box	3	3	3	3	3	3	2	2	2	1
Per Dozen	$1 50	1.50	2.50	2 50	3.00	3.00	4.00	5 50	7 00	10.00

No. 135—For 3, 4 and 5 Ply Steam Hose

Size Hose, In.	1	1¼	1½	1¼	2
Ply Hose	3	4	4	5	4
Diam. Open, In.	1 5/16	1 11/16	2 1/16	2 1/16	2 5/16
Wt. Doz., Lbs.	1½	1¾	2 5/16	2¾	3¾
Dozen in Box	3	3	3	3	2
Per Dozen	2.50	3 00	3.50	3 50	5 50

FINE IMPORTED ALARM AND NOVELTY ALARM CLOCKS

Clocks are of good construction and serve as reliable time keepers.

Our prices are surprisingly low and inasmuch as these Clocks sell on sight why not order a small assortment.

PRICES EACH

JOHN BULL ALARM

Height 8¼ inches, 4-inch dial. Figure and feet in metal, artistically colored. Has representa the bell.

No. 6169 Each $5.10

QUEEN ALARM CLOCK.

Imported Alarm Clock with guaranteed movement. 4-inch dial, Roman or Arabic figures, with second hand. One day time and alarm, with switch to shut-off alarm. Nickel-plated case.

No. 6170 Each $1.42

No. 6171 In case lots of 50 clocks. Each 1.33

DOUBLE BELL ALARM

Nickel-plated case with two bells. Height 5 inches. 4-inch dial, Arabic or Roman figures. Switch to shut off the alarm. One day time and alarm.

No. 6172 Each..... $2.00

PHONO ALARM CLOCK.

Alarm Clock with a [illegible] resonator on the same principle as the sounding disc of a telephone. Instead of the hammer strik ng on a bell, it strikes on a disc and a horn similar to a phonograph horn increases the sound and throws it correctly at the sleeper. The noisiest sleep dispeller ever made. Copper finished dust proof case. Height 7 inches. 4 inch Arabic dial. The most powerful alarm made.

No. 6173 Each $4.70

BABY PHONO ALARM CLOCK.

Same style as above, but smaller.

No. 6174 Each..... $5.10

METEOR.

Long intermittent alarm. Nickel case. Bell in back. 4 inch dial. Patent release for shut-off. Shut-off is released automatically when winding the clock. The alarm can be stopped at pleasure.

The dial is of white enamel finish with raised numeral ring. The numerals, therefore, are very distinct.

No. 6175 Each..... $2.27

GLOBE ALARM CLOCK

Imported Alarm Clock with a movement superior in quality to the ordinary time and alarm, with switch to shut off the alarm. 4-inch dial, Roman or Arabic figures, with second hand. Nickel-plated case.

No. 6176 Each $1.07

In case lots of 50 clocks.

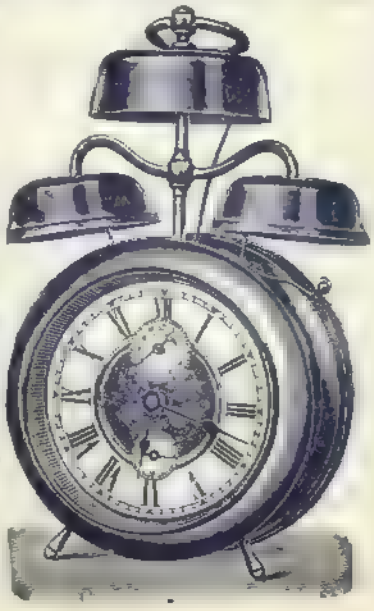
No. 6177 Each $1.00

TRIO ALARM CLOCK

Copper case. Height 8 inches. Enameled dial with gold center 4 inches.

Three bells and three hammers.

No. 6178 Each..... $4.30



The Lark Alarm

Our Prices are extremely low; our goods of highest standard and quality the best.

THE LARK ALARM CLOCK.
(Illustration reduced size.)

No. 6165 One-day time alarm. Each $1.92

The Standard Merchants' Clock

The Solid Pallet Clock

Seamless brass case with knurled front and flush back with knurled edge; case, mat, back and all trimmings nickel plated finish; has 2¼-inch bell. One-day movement, with solid pallets. Has switch for stopping alarm. Height 6½ inches; width 4⅝ inches. 4-inch dial.

The Celebrated and Popular "Junior Tattoo" Alarm Clock.

ILLUSTRATION EXACT SIZE.

THE JUNIOR TATTOO.

Nickel, height 3 inches. Its gentle, insistent alarm calls at the desired time. Every twenty seconds for five minutes, it rings unless the silent switch is turned. Carry it in your traveling bag; it is not much larger than a watch. Suitable for your own the guest and the maid's room, for the cook in the kitchen, the coachman and the chauffeur. Every home should have several.

No. 6166 Each $3.12

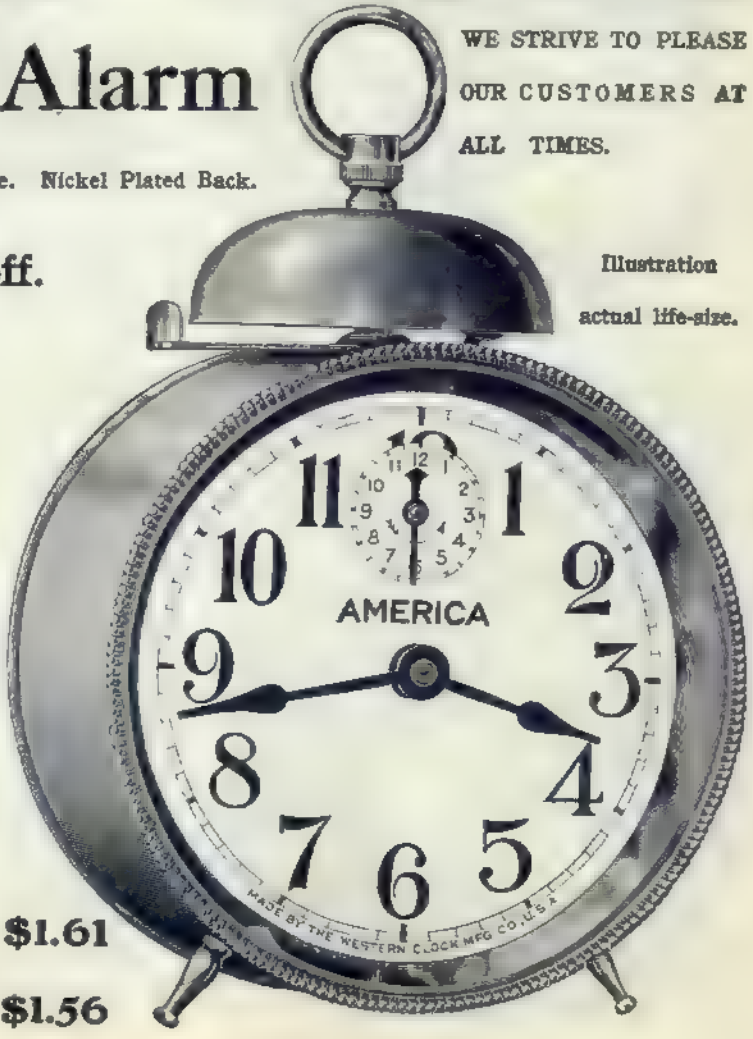
The America Alarm

WE STRIVE TO PLEASE OUR CUSTOMERS AT ALL TIMES.

Improved 4-inch, 32 hour alarm clock. Nickel Plated Case. Nickel Plated Back.

1911 Model With Shut-off.

Illustration actual life-size.



The America is the most popular American clock made. It is 6 inches high, runs over 32 hours with one winding and has a loud, clear ring that can be shut off at will—every clock is three times tested at the factory.

The low price at which we are able to offer this clock, its remarkably accurate timekeeping and its attractive appearance make of the America the best clock value in the market.

"Friction-Less" pivots; "Self-Centered" wheels; Hard Steel Pallet escapement.

No. 6167 Each $1.61

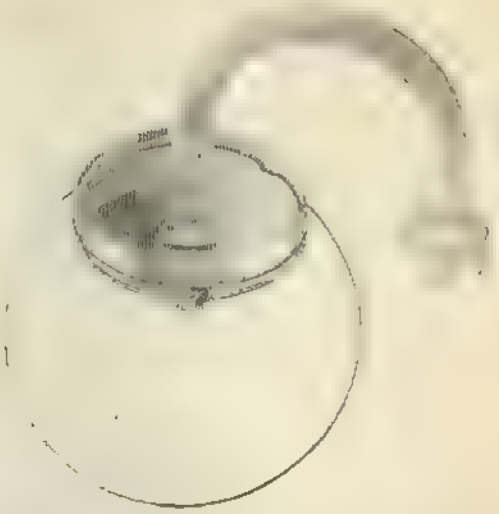
No. 6168 In case lots of 50 clocks **Each $1.56**

BOXED LIGHTS

INVERTED

Standard

No. 3. Oxidized finish, each..... $.....
No. 3. Brass finish, each..... .....
Complete as shown with mantle.



No. 54. Oxidized finish, each.. .. $.
No. 54. Brush brass finish, each.. .
Complete with globe and mant e

REFLEX LIGHTS AND GLASSWARE

No. 618

No. 317 No. 318

No. E1

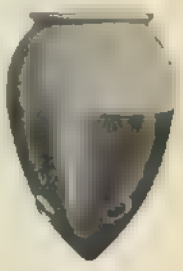
No. 618 Reflex Light, complete with No. 6 Reflex Lamp mantle chimney and No. 3 inner cylinder. For use with any style shade or globe, each.....$1 7
No. 317. Inner Cylinder, clear glass.....per dozen, 3.0
No. 318. Inner Cylinder, clear glass.....per dozen, 3.0
No. E1 Holophane Reflectors with patented Welsbach metal collar, per dozen, 14.00

GAS GLOBES

No. 575

No. 594

No. 981



No. 1094

No. 575. Opal fitter 2 in., height 6¾ in., diameter 4⅛ in. .per dozen, $. ...
No. 594. Frosted top fitter 2 in., height 5¼ in., diameter 4¼ in. .per dozen, . .
No. 981. Frosted top fitter 3⅛ in., diameter 5 in. .per dozen, .
No. 1094. Frosted top fitter 3⅛ in., height 7 in., diameter 4½ in., with air holes. ..per dozen,

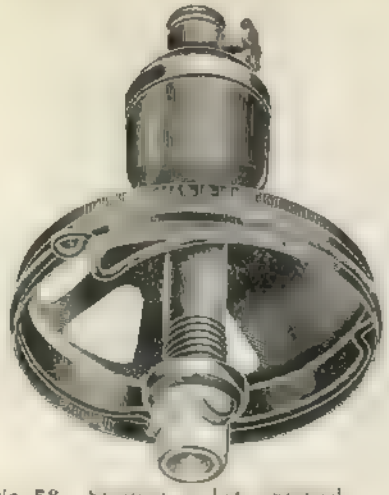
UPRIGHT BURNERS

No. 85. Improved [illegible] needle-valve adjustment, bright [illegible] finish, 2 in. glassware fitter, per dozen..... $2.80

GOOSE NECKS

No. 15. Goose neck for use with inverted light [illegible] burner, each ....$....

STRAIGHT SOCKETS



No. 58. Straight socket, [illegible] each ..... $.

No. 58. Straight socket, brush brass, each .....

UPRIGHT GAS MANTLES

No. 4C

No. 3S

No. 199C

TRUE BLUE

TIKI

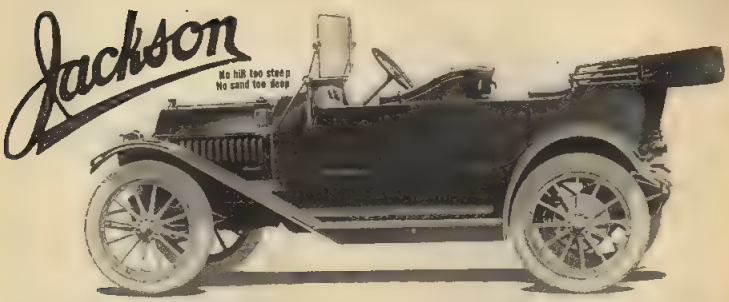
No. 4C. [illegible] weave, mounted on cap with [illegible] wire, with asbestos [illegible], per 100 $10.00

No. 3S. Welsbach single weave, mounted on cap with double wire support, excellent for the price, per 100 ..... 15 00

No. 199C. First quality, extra white light, heavy weave mounted on cap with double wire support, per 100 [illegible]

True Blue Cap Mantles, made from the [illegible] grade of Ramie [illegible] guaranteed [illegible] not blow loose under 5 pound pressure [illegible] double wire supports, per dozen..... 1 75

Tiki Cap Mantles, double wire, cement coated, single weave, mounted on No. 18 carrier. Can be supplied for either artificial or natural gas, per 100..... 9 00



1913 Jackson "Olympic"—$1500

35 H. P. Long-Stroke (4½ x 4¾) motor: 34 x 4 inch tires; 116 inch wheelbase, full elliptic springs; deep, roomy body with 10-inch upholstering; black and nickel trimmings. Regular equipment includes Self-starter, Mohair Top, Top Hood, Ventilating Windshield, Speedometer, Oil Gauge and Gasoline Gauge on Dash, Gas Tank, Demountable Rims, Extra Rim, Tire Carrier, Robe and Foot Rails in Tonneau, Pump, Jack, Tire Outfit and Tools.

Other Models

The "Majestic" at $1850 has a long-stroke (4½x5½) motor of 45 H. P. Its wheelbase is 124 inches; tires, 36 x 4 inches; springs, full elliptics, front and rear. It is equipped with Self-starter, Mohair Top, Top Hood, Ventilating Windshield, Speedometer, Oil Gauge and Gasoline Gauge on Dash, Demountable Rims, Extra Rim, Tire Holder, Electric Horn, Foot Rail, Coat Rail, Pump, Tools and Jack. It has powerful Electric Headlights with Parabolic Reflectors, Flush Dashlights (electric) and an Electric Tail Lamp. The current for the lights is supplied by a dynamo driven by the motor, which charges a storage battery for use when the motor is not running. The car has black and nickel trimmings.

Watch for our new six-cylinder touring car. It will be announced in a few weeks, and will be ready for early delivery.

A New Jackson Policy Along With the New JACKSON CARS

The Public has just received, in the Saturday Evening Post, our first announcement of the new Jackson models for 1913.

And the announcement marks the inauguration of a new policy on the part of the Jackson Company.

This policy provides for the most forceful advertising campaign that has ever been undertaken.

In other words the strongest, most efficient co-operation we have ever given Jackson dealers in the way of national and localized sales publicity.

The New Jacksons are really sensational cars.

They are as comfortable, as easy riding, as silent as the highest priced.

For the first time, they place cars of moderate price in direct competition in these respects, with the costliest makes.

You can see instantly, the advantage of these two features.

Cars that have no superior in the three big things—and a national advertising campaign that will tell the facts to the public, in full page and double page copy, month after month, during the entire season.

Good dealers can build up a steady, substantial business on standard high grade cars

This is the kind of line we are offering

A reputation of 11 years' standing, and an advertising campaign of tremendous force will establish the Jackson dealer in a lasting and profitable trade.

Our full and double page advertisements will reach every possible automobile buyer in the country every month through at least three different publications.

These are the strongest weapons we have ever placed in the Jackson dealers' hands.

We expect them to make 1913 a record year for the Jackson—in the number of cars sold; in the number of satisfied owners; in the number of successful dealers; in Jackson prestige.

Every Jackson dealer will share in the benefits and the profits.

And a good many of the up-and-doing dealers who appreciate a winning combination are going after the Jackson line.

If you are one of that kind and want to participate, don't let the day go by without getting in touch.

The good news has spread around and we are signing new territory right now, and signing it fast.

Wire, write or telephone the sales manager for an appointment.

Our Six-Cylinder, Seven-Passenger Touring Car will be announced soon,—watch for it!

Jackson Automobile Company, 1202 E. MAIN STREET JACKSON, MICHIGAN

We Believe This is the Best Car Ever Offered for $1800

We believe there is more actual car value—to the owner—more actual use and comfort to be had from the Dreadnought Moline M-40 than was ever before given at the price.

This is truly a wonderful car—Its nearest competitor at any price cannot show more added features of intrinsic merit in their latest models.

We will be believed because we have always built a good car and because we have always made conservative statements.

The unapproached record of the Dreadnought Moline in Reliability and Economy events makes this—our 10th season with our splendid refinements and equipment more than ordinarily interesting.

Read of the 20 exceptional features of this handsome model M-40 of the famous Long-Stroke Motor.

Dreadnought Moline

20 EXCEPTIONAL FEATURES OF THE M-40

10-inch more wheel base. (124")
Electric Lights. Dynamo System
5 more horsepower. (Full 40)
Improved Steering Gear
Gasoline Tank Under Cowl. (——) indicator and filler on dash
Improved Springs
Inside Control
Ten-Inch Upholstery
Turkish Spring Cushions
Flush Side Bodies
Nickel Trimmings
Long-Stroke Motor—40-H. P.
Enlarged Brakes
Prest-O Self Starter
Large Wheels and Tires
Exceptionally Roomy Body
Demountable Rims (set of five)
Double Independent Ignition System
Carburetor Dash Adjustment
Rain Vision Windshield

These are simply features and refinements added to the famous Dreadnought Moline—the car with the three point suspension and the unit power plant, in which is housed the Dreadnought Moline Long Stroke Motor 40 H. P.—the first of its type built in America.

No car sold at this price has ever approached the Dreadnought Moline M-40 in the luxury and comfort of its appointments, the completeness of its equipment, in reserve power, the bull dog tenacity of its Long-stroke motor on grades; its ease of control in crowded traffic; or its official record of victories in sanctioned Reliability and Economy Runs.

Many of the features here named you will find only on the highest priced cars. We want you to know how much these features mean to you whether you are a prospective owner or dealer.

We have printed a catalog that is interesting—that will not bore you—that tells the things you want to know about the car you will some day buy.

Don't wait for further announcements. Write today for the most interesting catalog ever written—about the most interesting car that was ever built.

DEALERS:—Write for our "square deal" proposition and open territory. We can interest you.

MOLINE AUTOMOBILE CO., 102 KEOKUK STREET EAST MOLINE, ILL.

COMBINED VISES AND ANVILS

Jersey Vises are High Grade in every Respect having Hardened Steel Faces, Solid Steel Screws and Square Lathe Cut Thread; Jaws fit perfectly; Used by Tool Makers, Jewelers, Amateurs, etc.

JERSEY VISE ASSORTMENTS

Per Asst. of 18

No 18—Assortment contains 18 Jersey Vises, as described below, with Revolving Display Stand, 21 in. High, 12x14 in. Base; Weight 80 Lbs. per Assortment.. ..... $52 50

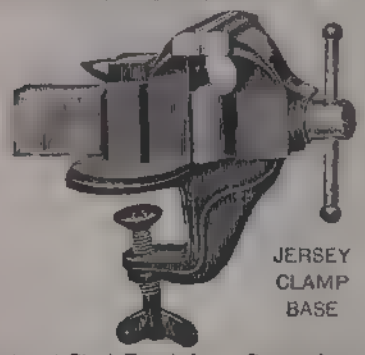
Size Nos	40	42	44	46	47	48	49	52	56	58
Width Jaw, In.	1½	1¾	2	2¼	2⅜	2½	2¾	3	1¾	2¼
Wt. Each, Lbs.	3	3¼	3⅝	4	4	5	5	8¾	3	4½
No. in Asst	3	3	3	2	1	2	1	1	1	1

JERSEY CLAMP BASE, PLAIN IRON JAWS

Brown Japanned Finish; for Amateurs

Nos.	Width Jaws, In.	Weight Each, Lbs.	*Each
40	1½	3	$1 50
42	1¾	3¼	1 90
44	2	3⅝	2 30
46	2¼	4 4	3 00
48	2½	5	3 50
52	3	8¾	4.80

Each Vise Wrapped in Moisture Proof Paper



JERSEY CLAMP BASE

Hardened Steel Faced Jaws, Brown Japanned Finish, for Tool Makers, Jewelers, etc.

Nos.	Width Jaws, In.	Wt. Ea., Lbs.	*Each
49	2½	5	$4.20
53	3	8¾	5 70

Each Vise Wrapped in Moisture Proof Paper

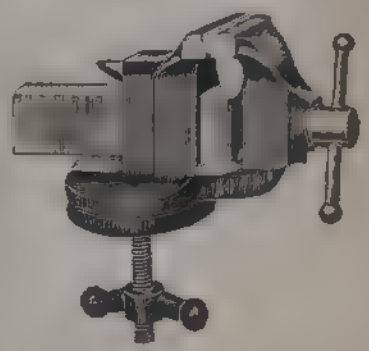
JERSEY STATIONARY BASE

Hardened Steel Faced Jaws; Width of Jaws 2 in.

	*Each
No. 22—Blue Japanned	$3.60
No. 23—Nickel Plated	4 60

One in a Box, Weight 4 Lbs. Each

For Tool Makers, Jewelers, Etc.



JERSEY SWIVEL BASE

Hardened Steel Jaws; Width of Jaws 2 in.

	*Each
No 34—Blue Japanned	$5 00

Weight 4½ Lbs. Each

BONNEY VISE ASSORTMENT SETS

Set of 12 Sizes and Styles, from 1 to 9 Inclusive, with 28 in. Display Stand which Shows the goods to best Advantage. Per Set

No. 12—Made of Cast Iron Long Steel Screw, Malleable Iron Thumb Screw, all Parts Interchangeable, Wt. 55 Lbs., per Set..... $15 00

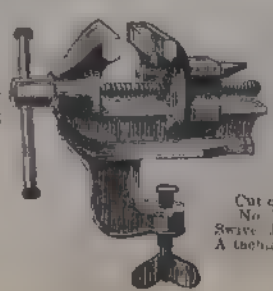
Stand and One Dozen Assorted Vises in a Box

BONNEY, With Swivel Jaw Attachment For Gripping Taper Pieces

	Per Dozen
No. 5—2¾ in. Iron Jaws, Open 3¼ in., Wt. 5 Lbs. Each	$19 50
No. 7—2¾ in. Steel Jaws, Open 3¼ in. Wt. 5 Lbs. Each	22 50

Open Stock

Especially Designed for All Light Work.



Cut of No. 1 Swivel Jaw Attachment

Used by Jewelers, Farmers, Wood and Metal Workers, etc.

BONNEY	Per Dozen
No. 1—1¼ in. Iron Jaws, Open 2 in. Wt. 1¼ Lbs. Each	$4 75
No. 2—2 in. Iron Jaws, Open 2½ in. Wt. 2 Lbs. Each	6 00

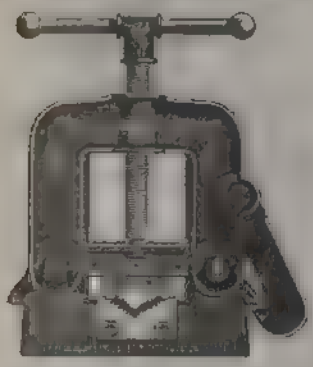
BONNEY	Per Dozen
No. 3½ 2¼ in. Iron Jaws, Open 2¾ in. Wt. 2⅞ Lbs. Each	$8 50
No. 3 2¼ in. Steel Jaws Open 2¾ in., Swivel Attachment; Wt. 2¾ Lbs.	12.00

BONNEY	Per Dozen
No. 4—2¾ in. Iron Jaws, Open 3¼ in.; Wt. 5 Lbs. Each	$16 50
No. 6—2¾ in. Steel Jaws, Open 3¼ in.; Wt. 5 Lbs. Each	19.50

Open Stock

PIPE VISES

Used by Plumbers, Steam Fitters, Miners, Pumpmen, Machinists, Blacksmiths, etc., for Holding Pipe and Rods while Threading and Cutting



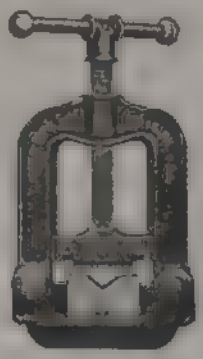
LATCH PATTERN

[illegible] Hinged Frame, Tool Steel Jaws, [illegible] and Hardened and Can be [illegible] be Opened Either Right or [illegible] on both Uprights, permitting [illegible] Either Side.

Nos.	Capacity Pipe, In.	Weight, Lbs.	Each
71	⅛ to 2½	12	$6.00
72	⅛ to 3½	19	7.00
73	⅛ to 4½	35	10.00

EXTRA JAWS

	Per Set of 3
For No. 71	$1.85
For No. 72	2.65
For No. 73	3.75



STANDARD PATTERN

Malleable Hinged Frame, Tool Steel Jaws. the Hinged Device allows long Length of Pipe to be Quickly Inserted at the Side.

Nos.	Capacity Pipe, In.	Weight Lbs.	Each
11	⅛ to 2½	12	$5.00
12	⅛ to 3½	15	7.00
	EXTRA HEAVY PATTERN		
13	⅛ to 3½	20	10.00

EXTRA JAWS

	Per Set of 3
For No. 11	$1.85
For No. 12	2.65
For No. 13	3.75

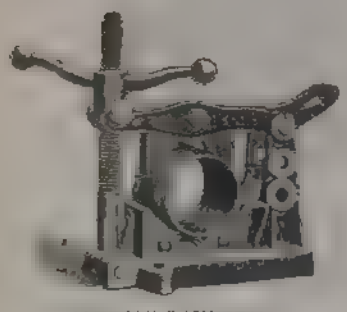
EXTRA HEAVY PATTERN

Malleable Hinged Frame, Tool Steel Jaws [illegible] Much the same as Nos. 71 72 and 73 except that [illegible] an extra [illegible]

Nos.	Capacity Pipe In	Weight Lbs	
00	[illegible] to 1½	[illegible]	$ [illegible]
60	[illegible] to 2	7 [illegible]	[illegible]
61	[illegible] to 2½	13	[illegible]
62	[illegible] to 3½	[illegible]	[illegible]
63	[illegible] to 4½	28	
64	[illegible] to 6	64	[illegible]
65	1½ to 8	80	40 00

EXTRA JAWS

	Per Set
For No. 00	$1.50
For No. 60	1.50
For No. 61	1.85
For No. 62	2.65
For No. 63	3.75
For No. 64	5.00
For No. 65	10.00



JAREKI PATTERN

[illegible] Iron Frame; Tool Steel Hardened [illegible] Holding Upper Jaw is Hinged, [illegible] Pipe to be placed in Vise at the Side; [illegible] Pipe, Bars, etc., this is a Handy [illegible] Apart Odd Work.

Nos.	Capacity Pipe, In.	Weight Lbs.	Each
1J	1½ to 6	67	$24.00
2J	6 to 12	168	60.00

EXTRA JAWS

	Per Set of 3
For No. 1J	$6.00
For No. 2J	15.00

TOLEDO

Malleable Hinged Frame; Tempered Tool Steel Jaws; will hold Pipe, Valves, Tees, Ells, Etc., and will not mar the surface of Brass and Nickel Fittings; Can be Opened Either Right or Left; Jaws can be recut.

Nos.	Capacity Pipe, In.	Weight Lbs.	Each
10	⅛ to 2½	18½	$10.00
20	⅛ to 4½	35	20.00

VULCAN CHAIN

Wrought Steel Frame; Drop Forged [illegible] Tempered Jaws; Hand Made Chain. Can be Carried in Hand or Tool Bag. [illegible] 6x8x8 in.; All Parts are Interchangeable.

No. 5—Capacity Pipe ⅛ to 4 [illegible] Weight 10 Lbs. Each [illegible] $3.50

EXTRA JAWS

For No. 5	[illegible]

All Above, Open Stock

COFFEE, DRUG AND SPICE MILLS

JEWEL

Per Dozen

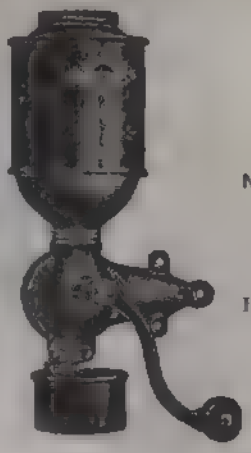
No. 1—Varnished Wood Back; 14 in. High, 4½ in. Wide, ¾ in. Thick; Red Japanned Corrugated Case or Hopper, Tin Top and Glass Canister Marked in Fractions of Pound; One Pound Capacity; Adjustable Grinders $12 00

Four in a Box

Weight 65 Lbs. per Dozen

Extra Canisters for above.....4 00

Weight 15 Lbs. per Dozen

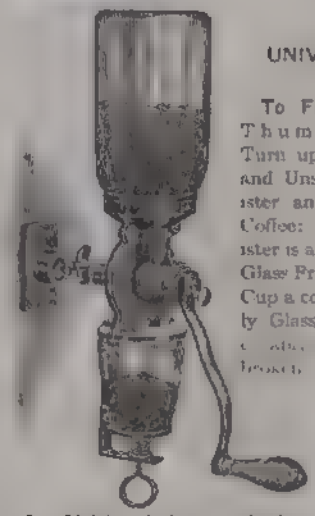


REGAL

Per Dozen

No. 44—Height 12 in., Diam. of Can 4½ in., Black Japanned Body; Air tight Tin Canister, with Screw Top; Capacity One Pound; Iron Grinding Case and Grinders; Nicely Decorated..... $9 00

Half Dozen in a Box, Weight 43 Lbs. per Dozen



UNIVERSAL

To Fill—Loosen Thumb Screw, Turn upside down and Unscrew Canister and pour in Coffee; the Canister is a two Quart Glass Fruit Jar, the Cup a common Jelly Glass, both are [illegible] broken.

Per Dozen

No. 24—Height 17 inches; Canister holds One Pound; Chilled Iron Grinders, Black Japanned Body, Gilt Lettering [illegible] Base, Each $17 00

Half Dozen in a Box, Weight 63 Lbs. per Dozen

MAHOGANY

Per Dozen

No. 8 Varnished Wood Back, 11½ in. High., 4⅛ in. Wide, Black Japanned Case, Holds One Pound of Coffee; Heavy Oval Pearl Glass in Front Showing Supply of Coffee, Nickel Plated Crank, Each $8 40

Half Dozen in a Box, Weight 37 Lbs. per Dozen

Each

No. 20—11 in. High, 6¾x5¼ in. Base, Countersunk for 2 No. 10 Screws, Iron Hopper Holds 6 Oz. of Coffee, Grinds ½ Lb. of Coffee per Minute, Two 9 in. Fly Wheels $3 50

Three in a Crate, Weight 20 Lbs. Each

Each

No. 11—14 in. High, 6¾x5¼ in. Base, Countersunk for 2 No. 10 Screws, Iron Hopper Holds 6 Oz. of Coffee and Grinds ½ Lb. of Coffee per Minute, One 9 in. Fly Wheel..... $2 50

Three in a Crate; Weight 15 Lbs. Each

Two Fly Wheels; Nickel Plated

WITH BRASS HOPPER

Nos.	40	60
Height, In.	23½	26
Size Base, In.	8½x7	9¼x7¾
Fly Wheel, In.	12	15
Capacity, Lbs.	1	1¼
Grinders, No.	4	1
Weight Each, Lbs.	40	68
Each	$9.00	12.00

WITH IRON HOPPER

Nos.	30	50
Height, In.	20	21½
Size Base, In.	8½x7	9¼x7¾
Fly Wheel, In.	12	15
Capacity, Lbs.	1	1¼
Grinders, No.	4	1
Weight Each, Lbs.	30	58
Each	$5 00	8 00

One in a Crate

WITH NICKELED BRASS HOPPER

Nos.	100	140
Height, In.	32	36
Size Base, In.	14½x10¼	16½x13
Fly Wheel, In.	20	24
Capacity, Lbs.	1½	3
Grinders, No.	1⅝	1¾
Weight Each, Lbs.	100	140
Each	$20.00	26.00

WITH IRON HOPPER

Nos.	90	120
Height, In.	30	36
Size Base, In.	13½x10¼	16½x13
Fly Wheels, In.	20	24
Capacity, Lbs.	1½	3
Grinders, No.	1⅝	1¾
Weight Each, Lbs.	[illegible]	158
Each	$15 00	20 00

One in a Crate

FLOOR COFFEE MILLS

Detachable Grinding Surface, Chilled and Hardened; Hopper holds 6 Lbs. of Coffee

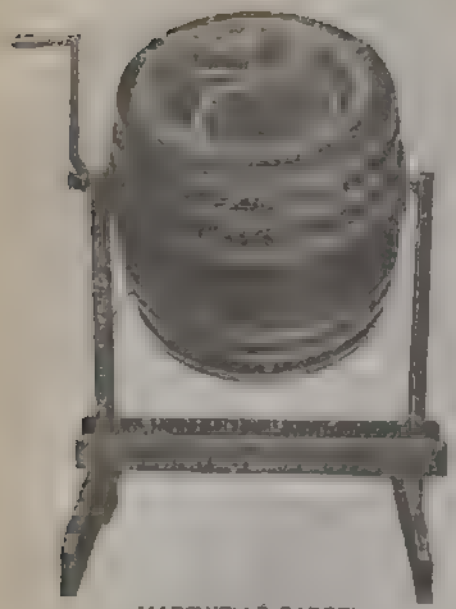
Each

No. 160—Height 66 in.; Base 25½x25 in., Two 30 in. Fly Wheels, Iron Hopper; Grinds Two Pounds of Coffee per Minute....$37 00

One in a Crate

Weight 337 Lbs. Each

CHURNS



MARSWELLS BARREL

Varnished Oak Staves, Oak Bottom, Galvanized Steel Bails, Rim Ears and Rings Aluminum Painted Hoops White Pine Head Hardwood Frame strongly made and Bolte

Nos.	0	1	2	3	4
Gals.	5	9	15	20	25
Churns, Gals	1 to 2	1 to 4	2 to 7	3 to 9	4 to 12
Wt. Ea., Lbs.	26	33	38	45	58
Each	$8.00	9.00	10.00	11.00	14.00

Open Stock

SUPERIOR SANITARY STONE

Sanitary Stone Body Set in Wood Frame,

Lever Lock; on account of its Great Weight, this Churn runs easily, like a fly wheel, by its

No.			
	3	12	15
	5	9½	10
		95	100
		17.00	19.00

ANTI-BENT

ed White and Varnished, Body Bound by Hoops and and Fast, has Hck and Gals End to Draw off Buttermilk; e a very Rapid Churner

Nos.	1AB	2AB	3AB
Capacity, Gals	9	12	15
	5	7½	10
	37	42	48
E	$6.00	7.00	8.00

One in a Crate

DASH

Selected Ash, Grained and Varnished, the

Nos.	1D	2D	3D
Capacity, Gals.	5	7	10
Height, In.	18	25	28
Wt. per Doz., Lbs.	180	216	256
Per Dozen	$20.00	22.50	25.00

Half Dozen in a Crate

WHITE CEDAR

White Cedar ed Stock, Varnishe Crank is held in place by Latch, is easily withdrawn and dasher removed for cleaning a washing out Churn.

Nos.	1C	2C	3C	4C
Capacity, Gals.	2½	4	7	10
Churns, Gals	1	2	4	7
Weight Each, Lbs.	14	18	22	30
Each	$2.50	3.00	3.50	4.00

One in a Crate

DAZEY GLASS

For Small Churnings; Sanitary, Easy Running Easily taken apart to clean; Clear Glass Body

Nos.	10	20	30	40
Cap., Pints	3	5	7½	9
Churns, Pints	1½	2½	3¾	4½
Wt. Doz., Lbs.	30	57	75	81
Per Dozen	$18.00	25.50	30.00	43.00

One in a Carton

CHURN REPAIRS

FOR MARSWELLS BARREL CHURNS

For Factory Shipment Only

No 1—COVER FRAMES

For Churns, Sizes	0	1	2	3	4
Weight, Lbs	2	2¼	2½	3½	4
Each	50	45	5	55	60

No 2 CHURN RIMS

For Churns, Sizes				3	4
Weight, Lbs				2½	4
Each	80	80	90	1 00	1.20

No 3 CHURN COVERS COMPLETE

For Churns, Sizes	0	1	2	3	4
Weight, Lbs	8½	9½	5	5½	6½
Each	$1 00	1 15	1 25	1 45	1.75

No 4 CRANK TRUNIONS

For Churns, Sizes			3	4
Each	40	45		30

SHORT TRUNIONS

No 4—For Churns, Sizes 0, 1, 2 and 3 $ 2

No. 5—CRANKS

For Churns, Sizes	0, 1	2, 3	4
Weight, Lbs.	1	1½	1¾
Each	50 50	60	80

No 7—BAILS

For Churns, Sizes	0, 1	2, 3	4
Weight, Lbs.	½	¾	1
Each	50 50	35	50

GRK PA KING

No. 9 For Churns, Sizes 0, 1, 2, 3, 4 5

COVER FASTENERS

No. 10—For Churns, Sizes 0, 1, 2, 3, 4. $

COVER BOLTS

No. 11—For Churns, Sizes 0, 1, 2, 3 $

Extra Quality Fielders' Gloves

Arrow Quality—Straight and Wing Web Thumb. Our Patent Pocket Center.

The gloves described below we produced after thoughtful study concerning the individual requirements of the most exacting Professional players, taking into consideration suggestions by them as to the details which were necessary to make a perfect Fielder's Glove. The materials were then selected with care, the very best in each case for the particular purpose, care being used also to properly harmonize bindings and welts, so as to make these gloves as attractive in style as in finish and durability. We believe we have attained the desired result.

8555

8555 The Prof. League Glove. Made of specially dressed Indian tanned drab buckskin. A very soft and pliable leather of which we are the sole users for a baseball glove. Green welted seams sewed in with the best waxed linen thread. Green leather binding. Specially padded. Reinforced gussets at thumb and fingers which prevent ripping. Double stitched throughout. Button and strap back, with a full lining of leather. The finest glove on the market. Guaranteed in every particular. Packed one in a box. Each.....$7 00

8556

8556 The Evers "Special" Model. All black. Selected horsehide. Soft pearl sheepskin lining throughout. White welted seams sewed with a waxed linen thread. Padded lightly in palm with the best gray felt, forming a perfect pocket. Black binding. Strap and button back, and double stitched throughout. Guaranteed. Packed one in a box. Each..... $6 00

8557

8557 The Prof. "Special" Model. All Cremore Kip, light in shade, very soft and pliable. Light green kid leather lining throughout. Green leather binding. Tan seams welted with waxed linen thread. Other details of making same as our 8556. Guaranteed. Packed one in a box. Each...$6 00

8558 Men's National League Style. All black, selected horsehide. Soft tan leather lining throughout. Welted seams sewed with waxed linen thread. Padded lightly in palm with best grey felt. Built up inner heel and straight thumb, forming a perfect pocket. Strap and button back. Double stitched throughout. Guaranteed. Packed one in a box. Each $5 50

8558

8559 Men's Special League Infielder's Glove. Velvet Cremore Kip. Very soft and pliable. Tan welted seams sewed with waxed linen thread. Soft tan leather lining throughout. Double stitched. Wing thumb, patent pocket center. Guaranteed. Packed one in a box. Each.....$5 00

8559

8560 Association Special. Best pearl calfskin, very soft and pliable, tan welted seams, soft tan leather lining throughout, straight web thumb, patent pocket center. Made and finished same as our highest grade gloves; guaranteed; packed one in a box. Each.....$4 00

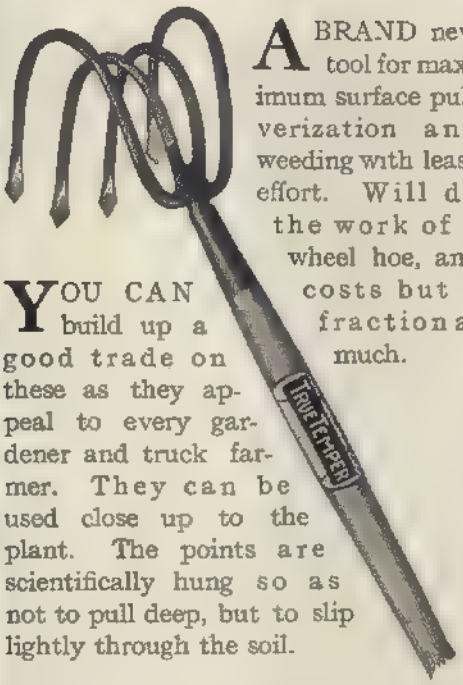
8561 Amateur Special. Finest No. 1 grade, black chrome sheepskin, soft and pliable, leather lined; wing web thumb; patent pocket center; guaranteed; packed one in a box. Each.....$2 50

8560

There Is Satisfaction in Knowing Where to Get What You Want, When You Want It, and Always at the Right Price.

"THE HOUSE OF QUALITY"

Featherweight Cultivator



A BRAND new tool for maximum surface pulverization and weeding with least effort. Will do the work of a wheel hoe, and costs but a fraction as much.

YOU CAN build up a good trade on these as they appeal to every gardener and truck farmer. They can be used close up to the plant. The points are scientifically hung so as not to pull deep, but to slip lightly through the soil.

¶ This cultivator is forged from a single piece of high-grade steel, oil tempered, and really featherweight. Our experience has shown us that the "adjustable" feature is seldom actually used and of questionable value, while it adds greatly to the weight of adjustable cultivators. Points are drop forged, very hard. Tines have correct spring taper. 4½ foot handles, or special short handles, if desired.

F. W. 3—Three broad oval prongs
F. W. 4—Four broad oval prongs

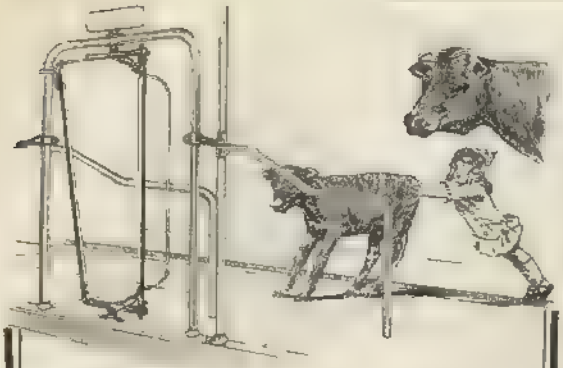
Its Low Price Will Surprise you

True Temper Tools are like friends who understand -They wear best.

Just as much cheaper in cost over heavy, clumsy, adjustable" cultivators, as it is lighter in weight. Write us today for quotations.

FARM & GARDEN TRUE TEMPER TOOLS

The American Fork & Hoe Co.
CLEVELAND, OHIO



Begin Early

To Get YOUR Share Of The Business!

Get in on the ground floor. Start now! We're booming business. All *you* have to do is cash in on the demand we have created. Farmers all over the country are responding to our big inquiry-pulling advertising campaign. We want to turn the inquiries from your district over to you and co-operate with you in making sales.

★ STAR ★

Stalls & Stanchions

(***The Only Unit System Stall***)

are the most practical, the most durable, the best all-round stalls and stanchions for *your* customers. They are the most convenient for you to handle—the only unit system stall and stanchion on the market—the only system which allows you to put a single stall and stanchion on display. This feature alone is worth money in your pocket.

Get Our Dealer Proposition

Drop us a line today. Find out about the entire Star Line—Litter, Feed and Milk Can Carriers—Barn Door Hangers—Haying Tools, Stock Tank Heaters etc., etc Find out all about our special dealer proposition. It'll open your eyes! Drop us a card today.

THE STAR LINE GOODS

Hunt, Helm, Ferris & Company

164 Hunt St., Harvard, Ill.

(36)

Runs by Gas Engine

Go

After the Grindstone Business in Dead Earnest

That means sell grindstones that will put keen edges on tools—that will satisfy your customers—sell *Cleveland* Grindstones and people will mark you as a *quality* merchant.

Don't you know that *one really genuine article* has often induced folks to patronize the same store to the extent of hundreds of dollars?

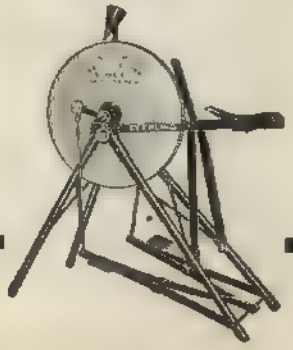
Cleveland Grindstones

are the standard of comparison for quality in the United States. They are made exclusively of *genuine* Berea and Huron stones—there are no other stones that combine the essential sharpening qualities of grit and toughness.

Cleveland Grindstones are made in all sizes, for all purposes—power, hand and treadle. There is more profit handling Cleveland Grindstones than any other kind.

Write for Catalogue and Prices.

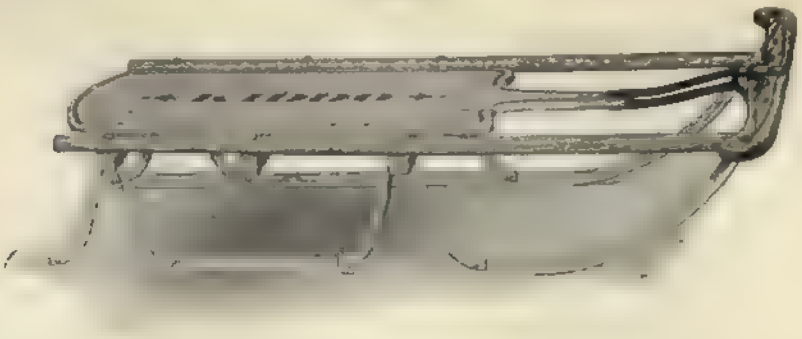
THE CLEVELAND STONE CO.
Cleveland, Ohio



STEERING SLEDS

Steel parts of these sleds are finished red and all wood parts natural color.
They can be guided to the right or left at will, thus answering the purpose of a bob sled

KIDDO



No. 75. Length 31 in., height 6 in., width 12 in., weight per dozen 70 pounds.... .per dozen, $16.75
No. 85. Length 33 in., height 6 in., width 12 in., weight per dozen 75 pounds .per dozen, 18.00
No. 86. Length 36 in., height 6 in., width 12 in., weight per dozen 80 pounds .per dozen, 22.00
No. 87. Length 40 in., height 6 in., width 12 in., weight per dozen 85 pounds... per dozen, 26.00

KIDDO RACER

No. 88. Length 45 in., height 6 in., width 13 in., weight per dozen 100 pounds... ..per dozen, $33.00
No. 89. Length 51 in., height 6 in., width 13 in., weight per dozen 120 pounds .per dozen, 36.00

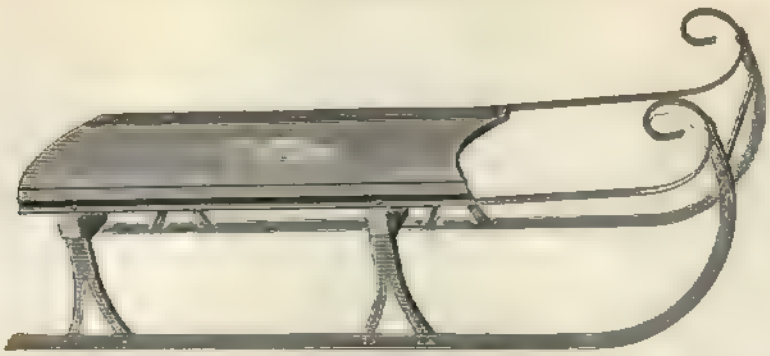
BUFFALO FLEETWING

No. 300. Length 45 in., height 8½ in., width 15 in., weight per dozen 144 pounds. .per dozen, $45.00
No. 350. Length 51 in., height 8½ in., width 17 in., weight per dozen 180 pounds..... per dozen, 48.00
***No. 400.** Length 51 in., height 8½ in., width 17 in., with foot rests, weight per dozen 186 pounds.. .per dozen, 54.00

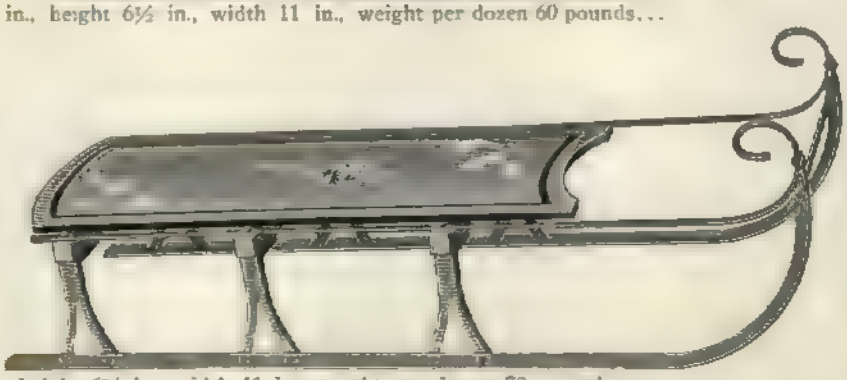
FLEETWING RACER

No. 500. Length 55 in., height 7 in., width 15 in., weight per dozen 130 pounds per dozen $47.00
***No. 600.** Length 55 in., height 7 in., width 13 in., weight per dozen 140 pounds per dozen 52.00
***No. 700.** Length 60 in., height 9 in., width 13 in., weight per dozen 150 pounds per dozen 60.00
*Not carried in stock

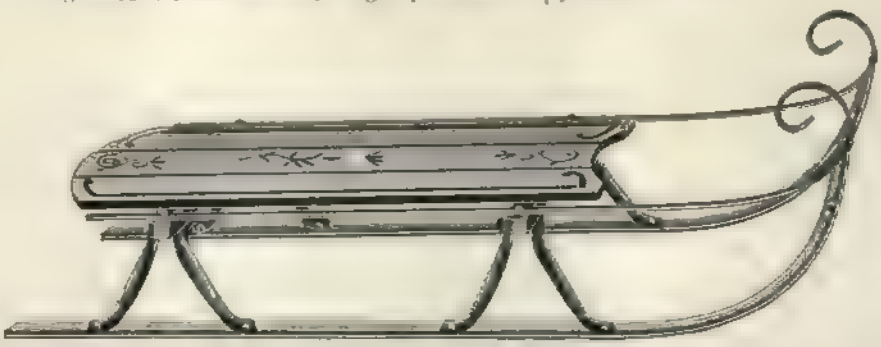
SLEDS



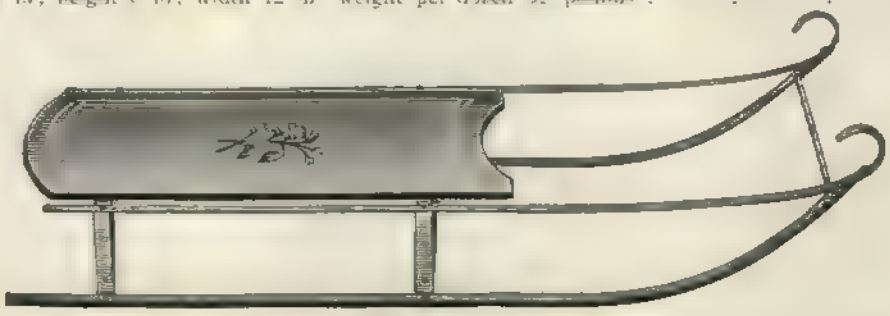
No. 34. Length 30½ in., height 6½ in., width 11 in., weight per dozen 60 pounds... .per dozen, $13.00



No. 36. Length 34 in., height 6½ in., width 11 in., weight per dozen 72 pounds.....per dozen, $16.00



No. 28. Length 32 in., height 6 in., width 12 in., weight per dozen 80 pounds... per dozen $18 00
***No. 32.** Length 37 in., height 6 in., width 12 in., weight per dozen 95 pounds... per dozen 21 00



Nos. 18 and 4

No.	Length	Height	Width	Weight	Per Doz.
*18	34 in.	4½ in.	12 in	60 lbs	$14 00
4	38 in.	4½ in.	12 in.	85 lbs.	18 00
80	27 in.	6 in.	10 in.	52 lbs.	11 00
82	30 in.	4 in.	10 in.	50 lbs.	11 00

*Not carried in stock

Nos. 80 and 82

The truck of excess capacity and reserve power

KisselKar truck design and construction take into consideration the occasions when stress of business will necessitate loading in excess of rated capacity. The wide power and capacity margin above ratings meet the needs of a growing business, and furnish a greater reserve strength which decreases up-keep costs.

Competitive tests have demonstrated KisselKar Trucks to be from 15% to 20% more economical of fuel than other trucks of same ratings.

These two factors—excess capacity and fuel economy, which are big items of annual saving, give KisselKar Trucks a wide service margin over trucks of average standard.

KISSELKAR SERVICE maintains every KisselKar at best working efficiency. This service is supplied by a national service organization maintained by the manufacturers. Specially constructed and equipped buildings at principal points of America are service-centers cooperating with sales agents in supplying a service that lowers operating costs, retards depreciation and insures uninterrupted service.

KISSELKAR TRUCKS

1500 lbs., 1, 2, 3, 4, 5 tons

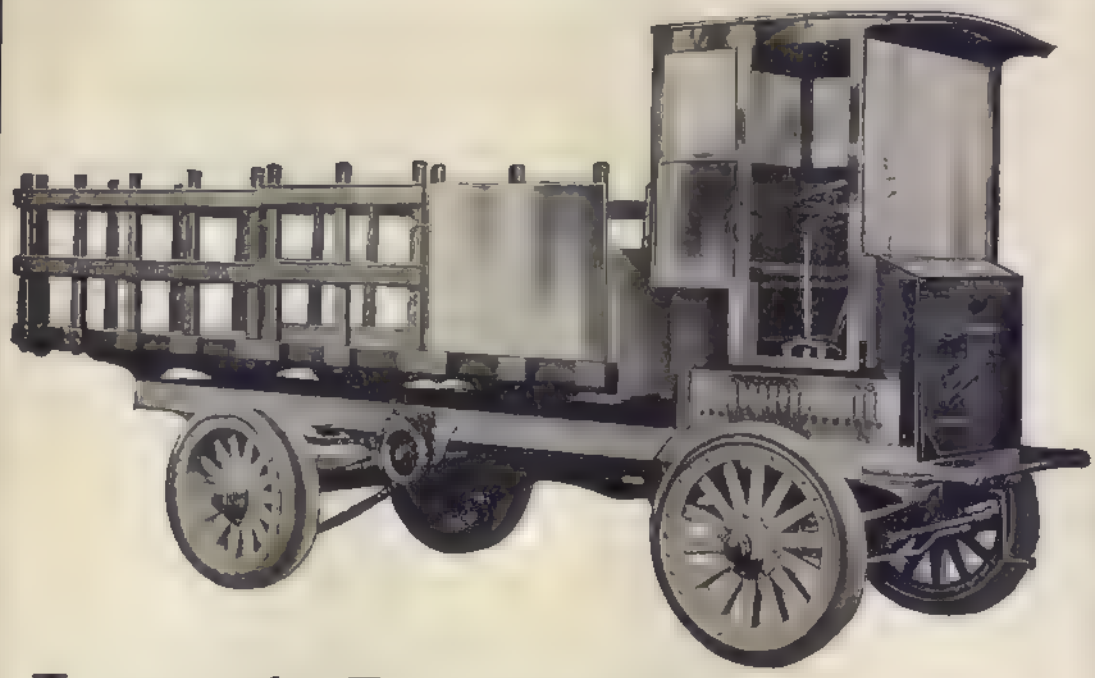
A fleet of 4 KisselKar Trucks that supplanted 40 horses—Owned by Alexander H. Revell & Co., Chicago

Write for special KisselKar Truck Catalog, illustrating KisselKar Trucks now in use in every kind of haulage and delivery service. All type bodies—special bodies designed to meet special needs. Write for truck catalog today.

Kissel Motor Car Co., 120 Kissel Ave., Hartford, Wis.

BOSTON, NEW YORK, CHICAGO, MILWAUKEE, KANSAS CITY, LOS ANGELES, MINNEAPOLIS, ST. PAUL, ST. LOUIS, DALLAS

Philadelphia, Cleveland, Detroit, El Paso, San Antonio, New Orleans, Baltimore, Omaha, Butte, Denver, San Francisco, Seattle, Portland, Duluth, Buffalo, Pittsburgh, Hartford, Conn., New Haven, Albany, Troy, Montreal Quebec, Toronto, Winnipeg, and 200 other principal points throughout America



Lauth-Juergens Motor Trucks

HARDWARE merchants are quick to realize the importance of Motor delivery. Where we have sold trucks to the hardware merchant they have invariably increased their business, some having covered double the territory previously covered by the horse drawn vehicle.

Lauth-Juergens trucks are as important to the hardware merchant as the stock on his shelf. They are built to give maximum service and run the year round in all kinds of weather. The quality, workmanship, material, engineering etc., makes the Lauth-Juergens truck stand in a class by itself. When you buy a truck buy a good one—first cost is small compared to the service you get.

The motors in Lauth-Juergens trucks are guaranteed for the life of the truck, the truck is guaranteed against imperfect workmanship and material—every part of it—and we are financially able to stand back of any guarantee we make to a purchaser of Lauth-Juergens trucks. Write us and tell us what your requirements are and we will send you our 1912 Motor truck catalogue and facts concerning your particular business.

The Lauth-Juergens Motor Car Co.

Fremont, Ohio

BRANCHES & AGENCIES

BOSTON
Lauth-Juergens Motor Co. of New England
[illegible]

NEWARK, N. J.
Merchants Motor Car Co
Fawcett Building

DETROIT, MICH
Bleil Auto Truck Sales Agency,
453 Dix Ave.

CHICAGO
Lauth-Juergens Motor Co.
[illegible]

[illegible]
Mutual Auto Co.

DISTRICT OF COLUMBIA AND VICINITY
Bowles Motor Sales Co., Inc.
1608 14th St., N. W., Washington, D. C

[illegible]

TOLEDO, OHIO
[illegible]
100-104 Ontario St.

DE LAVAL
CREAM SEPARATORS

Bring profit and satisfaction to the dealers handling them

If you have never handled the DE LAVAL CREAM SEPARATOR there are possibilities for increasing your separator profits that you have not yet realized

EXPERT EVIDENCE

Minnesota Agents say: "We Have Sold Over 1,000 De Lavals and Each Year Find It Easier to Make Sales."

Faribault, Minn., July 22, 1911.

The De Laval Separator Co., Chicago, Ill.

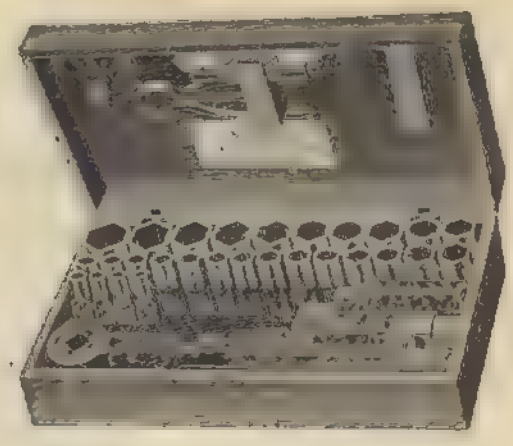
Dear Sirs: It is with pleasure that we reply to your request concerning our experience with the De Laval Separator We ought to be fairly well posted after twenty-seven years' work with them, and the sale of over 1,000 machines.

During that time we have had all kinds of machines, competition and prices, but by constantly preaching quality and never cutting price, we have always kept in the lead We were always victorious in every contest and each year find it easier to make sales, as the policy of the Company is to keep up with the times and render first class assistance in every way to their agents

Yours, etc., CAVANAUGH & FRINK.

The DE LAVAL SEPARATOR CO.

165 Broadway NEW YORK
29 E. Madison Street CHICAGO
Drumm & Sacramento Sts. SAN FRANCISCO
173-177 William Street MONTREAL
14 & 16 Princess Street WINNIPEG
1016 Western Avenue SEATTLE



The Tool that is Called For—

Starrett Patent Ratchet Wrench

RAPID action in cramped places because of continuous movement through short arcs —impossible without a ratchet,—is easy with this tool.

The 28 sockets with extension pieces reach into otherwise inaccessible places.

The drilling fixture will hold any size of twist drill from $\frac{1}{8}$" to $\frac{1}{2}$", and is fed by a spindle friction wrench supplied with each tool.

Our Catalog No. 19 C describes other Starrett tools that workmen appreciate.

THE L. S. STARRETT COMPANY
ATHOL, MASS., U. S. A.

New York
150 Chambers Street

Chicago
17 No. Jefferson St.

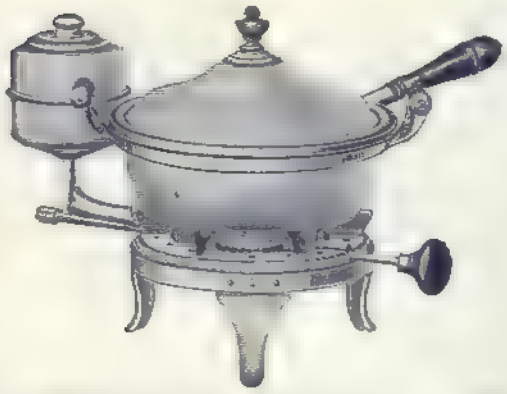
London, 36-37 Upper Thames St., E. C.

We manufacture Fine Mechanical Tools Bevels, Calipers, and Dividers, Center Testers, Clamps, Drill Blocks, Gages Hack Saws and Frames, Levels, Micrometers, Rules, Scribers, Speed Indicators, Squares, Test Indicators, etc.

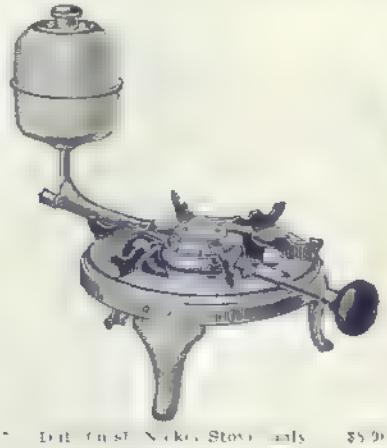
439

Manning-Bowman & Co. Alcohol Gas Stove Chafing Dishes With Tank

These stoves manufacture their own gas and burn a blue flame like the ordinary gas range burner. The alcohol is not burned direct as in the usual chafing dish burner, but is vaporized and mixed with air which produces a blue flame powerful enough for any cooking. It has three times the heating power of the ordinary lamp, yet regulates to a simmering flame at a touch. Costs less than two cents an hour to run. Alcohol will not evaporate when not in use. Is sootless and odorless.



No. [illegible] Chafing Dish and Stove. Diameter of dish, 9¼ inches; capacity, 3 pints. Nickel plated. Each $16.70



No. [illegible] Dish and Nickel Stove only $8.90
No. 72 Polished Nickel Stove only..... 8.80

No. 303-76 Chafing Dish and Stove. Diameter of dish, 9¼ [illegible] capacity, 3 pints. Nickel plated. Each $22.70

CHAFING DISHES WITH NEW ALCOLITE WICK FEED BURNER STOVES

Operates on same principal as those with tank. Burns denatured alcohol gas mixed with air which produces a powerful flame which can be regulated to any size. The invisible wick does not come in contact with flame, so requires no renewing. Will burn full flame for one and one-half hours. Alcohol will not evaporate when not in use. The only chafing dish stand that can be used as a stove for other cooking utensils without the use of hanger or other additional parts.

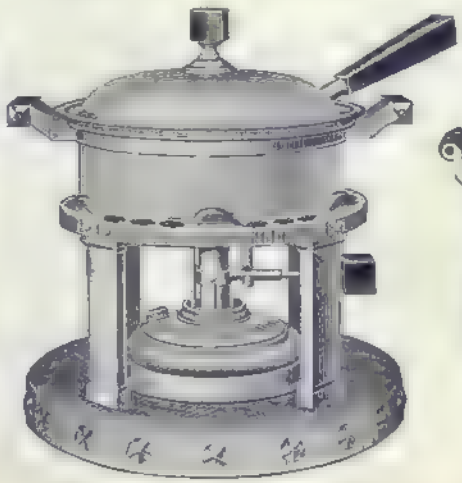
MISSION STYLE CHAFING DISH WITH "ALCOLITE" BURNER.
No. 349-86 Nickel. Diameter 9¼ inches, capacity, 3 pints ..... $[illegible]
No. 349-86C Same, solid copper [illegible]

CHAFING DISH WITH "ALCOLITE" BURNER.
No. 348-92 Nickel. Diameter, 9¼ inches capacity, 3 pints [illegible]

MISSION STYLE CHAFING DISH WITH "ALCOLITE" BURNER.
No. [illegible] Nickel. Diameter [illegible] inches capacity, [illegible] pints $[illegible]
No. [illegible] Same, solid copper .... [illegible]

CHAFING DISH WITH "ALCOLITE" BURNER

No. 340-84 Nickel. Diameter, 9¼ inches; capacity, 3 pints $18.55



MISSION STYLE WITH "ALCOLITE" BURNER
Has heavy dark oak base with band.
No. 356-91 Nickel. Diameter, 9¼ inches; capacity, 3 pints; diameter of base 12 inches ..... $[illegible]
No. [illegible] Same, solid copper [illegible]

CHAFING DISH WITH "ALCOLITE" BURNER

No. 346-84 Nickel. Diameter, 9¼ inches. [illegible] $19.10
No. 346-84C Same, solid copper 19.10

Manning, Bowman & Co. Percolators, Nickel Plated or Solid Copper

Always insures delicious coffee and saves one-third. Coffee made by this method is superior as a beverage, as it is distilled and not boiled. By this [illegible] process [illegible] strength is extracted [illegible] the most economical method of making coffee of the finest flavor. Starting with cold water coffee is ready to serve in fifteen minutes. When coffee is made the flame can be reduced to keep coffee hot. Simple in construction and easy to clean.

URN PERCOLATOR.

No. 5192 Nickel Plated 2½ pints or 6 cups $13.35
No. 5192C Same, solid copper 13.35

Mission Style Percolator Set

Percolator Capacity 3 Pints or 8 Cups

Sugar, 12 ounces. Silver lined.

Cream, 8 ounces. Gold lined.

Tray, 10x14 inches, With Mission Handles.

No. 4293 Set 4 pieces complete, nickel plated 37 35
No 4293C Set 4 pieces complete, solid copper 37 35

URN PERCOLATOR, NICKEL PLATED

No. 4192 2 pints or 5 cups $13 35
No. 4193 3 pints or 8 cups 14 95
No 4194 4 pints or 10 cups 16 35

URN PERCOLATOR.
3 Pints or 8 Cups.

No. 3293 Nickel $23.80
No. 3293C Same, solid copper 23.80

4 Pints or 10 Cups.

No. 3294 Nickel $26 70
No. 3294C Same, solid copper 26 70

URN PERCOLATOR.
3 Pints or 8 Cups.

No. 4293 Nickel $17 75
No 4293C Same, solid copper 17 75

4 Pints or 10 Cups.

No. 4294 Nickel $19.35
No. 4294C Same, solid copper 19 35

URN PERCOLATOR.
Nickel Plated.

No. 4592 2 Pints or 5 Cups.. $18.40
No. 4593 3 Pints or 8 Cups.. 19 90
No. 4594 4 Pints or 10 Cups 21 35

URN PERCOLATOR
Nickel Plated.

No. 4492 2 Pints or 5 Cups.. $16.50
No. 4493 3 Pints or 8 Cups . 18.00
No 4494 4 Pints or 10 Cups. 19.35

Nickel Plated and Aluminum Percolators

FOR USE ON GAS STOVE OR RANGE

Nickel Plated and Aluminum Percolators for use on gas stove or range. Principle same as those with lamp. Starting with cold water it will percolate immediately and coffee will be ready to serve in fifteen minutes. Has no valves to clog and is easily cleaned. Glass top is constructed with metal cap protector, which prevents breakage when in use.

NICKEL PLATED STOVE POT.

No. 8292 2 Pints or 5 Cups $6 55
No. 8293 3 Pints or 8 Cups . 7 60
No. 8294 4 Pints or 10 Cups 8 55
No. 8295 5 Pints or 12 Cups 9.60

SECTIONAL VIEW OF STOVE PERCOLATOR.

ALUMINUM STOVE POT.

No. 9092 2 Pints or 5 Cups $6 80
No. 9093 3 Pints or 8 Cups . 7.90
No. 9094 4 Pints or 10 Cups 8 95
No. 9095 5 Pints or 12 Cups. 9.75

NICKEL PLATED STOVE POT.

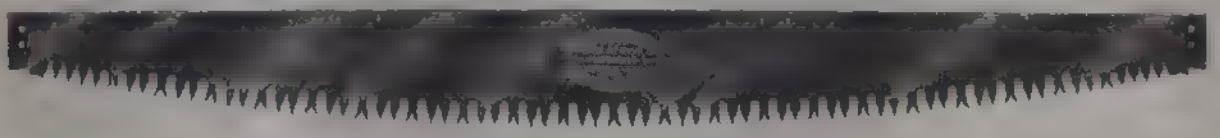
No. 8293 3 Pints or 8 Cups..$12.95
No. 8294 4 Pints or 10 Cups. 14.40

MARSWELLS CROSS CUT SAWS

ARC GROUND

Marswells Cross-Cut Saws combine all the practical and important features developed in saw manufacture. They are superior in Material, Workmanship, Temper and Finish, and are made to our own specifications from Saw Steel of Special Analysis, selected and tested in our own Laboratories, each saw having a uniform 14 Gauge Cutting Edge, the Easiest and Lightest Running cross-cut saws made.

Marswells Saws are ARC GROUND, which means that the Blade is ground in Arc or Crescent shape, making the cutting edge thin Back in the center, resulting in having the teeth of the edges heavier on the back than the center, making the set will be required; requires less set than usual and does an equal amount of work as a saw of uniform thickness and strength to hold the set required for easy cutting.

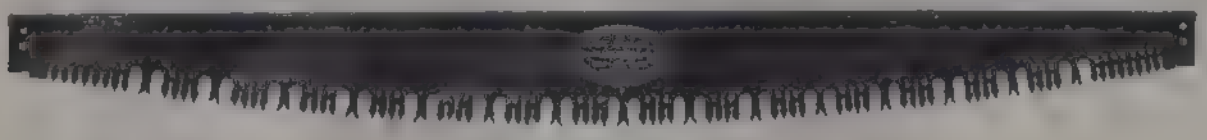


No. 33—MARSWELLS CHAMPION TOOTH

14 Gauge at Cutting Edge, 19 Gauge at Center on Back of Saw, 16 Gauge at Ends on Back of Saw; Two Cutting Teeth to each Raker

Extra Polished and Etched, Hand Filed and Set, Ready for use; Easiest Style to Keep in Shape

Length, Feet	4½	5	5½	6	6½	7
Weight, Each, Lbs.	4⅝	4⅞	5⅛	7¾	8⅛	9¼
Each, without Handles	$3.60	4.30	5.10	5.90	6.80	7.80



No. 32—MARSWELLS PERFORATED LANCE TOOTH

14 Gauge at Cutting Edge, 19 Gauge at Center on Back of Saw, 16 Gauge at Ends on Back of Saw. Four Cutting Teeth to Each Raker, Deep Gullets.

Extra Polished and Etched, Hand Filed and Set, Ready for Use; Fast Cutting Easy Running

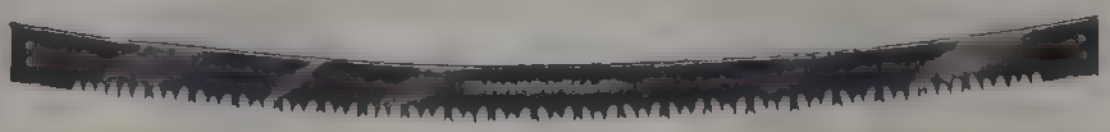
Length, Feet	4½	5	5½	6	6½	7
Weight, Each, Lbs.	4⅝	4⅞	5⅛	7¾	8⅛	9¼
Each, without Handles	$3.60	4.30	5.10	5.90	6.80	7.80

No. 313—MARSWELLS TUTTLE TOOTH

For Large or Small Timber; Requires no Wedge to Prevent Binding; Thin Back, Two Cutting Teeth to Each Raker

Length, Feet	5	5½	6	6½
Gauge at Tooth Edge	15	15	14	14
Gauge at Back Edge	20	20	19	19
Width at Center, in. (all 3¾ in. at Ends)	5⅛	5⅛	5⅜	5⅜
Weight Each, Lbs.	4	4¾	5¾	6¾
Each, without Handles	$4.30	5.10	5.90	6.80

NARROW, OR FELLING SAWS



No. 414—MARSWELLS CHAMPION TOOTH

Width 3¼ in.; 14 Gauge at Tooth Edge, and Same on Back Edge, Two Cutting Teeth to One Raker

Length, Feet	5	5½	6	6½
Weight, Each, Lbs.	3⅛	4	4½	5¼
Each, without Handles	$1.75	1.93	2.10	2.28

All Above are Open Stock

SWEDISH BUCK SAW BLADES, FRAMES AND CLIPS

Extra Thin Back

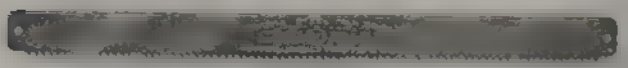
These Blades are 6 and 4 Gauges thinner on Back than on Cutting Edge

STRAIGHT V TOOTH

	Per Dozen
No. 42—48x3 in., 6 Gauge Taper Weight 13¾ Lbs. per Dozen	$15 [illegible]
No. 43—48x2 in., 4 Gauge Taper Weight 9½ Lbs. per Dozen	13 00
No. 33—39x2 in., 4 Gauge Taper Weight 7¼ Lbs. per Dozen	10 00

CHAMPION OR TUTTLE TOOTH

	Per Dozen
No. 1—30x2 in., 4 Gauge Taper Weight 5½ Lbs. per Dozen	$8 [illegible]



PLAIN OR REGULAR V TOOTH

	Per Dozen
No. 13—30x2 in., 4 Gauge Taper, 3 Teeth to Inch Weight 5¾ Lbs. per Dozen	$7.00
No. 14—30x2 in., 4 Gauge Taper, 4 Teeth to Inch Weight 5¾ Lbs. per Dozen	7.00

STEEL BOW FRAMES

Made of Tubular Steel, One end is flattened and welded, the [illegible] is round and requires the use of 1 Bow Clip to fasten Saw to Frame

	Per Dozen
No. 39—For 39 in. Blades Weight 43 Lbs. per D[illegible]	$20 00
No. 48—For 48 in. Blades Weight 52 Lbs. per Dozen	24 00

BOW CLIPS

	Per [illegible]
No. 0—Bow Clips for 39 and 48 in. Blades Weight 4 Lbs. per Dozen Pairs	[illegible]

BUCK SAW RODS

For Buck Saws shown on Previous Pages

Tinned Steel Wire Rod and Loops, Malleable Iron Turnbuckle, Japanned Swivel Rolling Center, Strong Square Cut Threads, will not strip nor pull out, Loops are Riveted with Strong Heads; Measurement is Extreme Length when Extended

	Per Dozen
No. 22—Length 22 in.; Weight 8½ Lbs. per Dozen	$2 50
No. 23—Length 23 in.; Weight 8¾ Lbs. per Dozen	$2.50

One Dozen in a Box

DUPLEX

	Per Dozen
No. 023—Length 23 in.; Extra Quality Bright Steel, Special Cut Thread, Malleable Iron Turnbuckle; Rod is Shouldered to Give Extra Strength where Thread is Cut One Dozen in a Box; Weight 6½ Lbs. per Dozen	$2 00

CLIPPER

Bright Steel Wire, Cast Iron Swivel, 3 in. Take Up in Turnbuckle

	Per Dozen
No. 220—Length 22 in.; Weight 5 Lbs. per Dozen	$1 80
No. 230—Length 23 in.; Weight 5¼ Lbs. per Dozen	1 90

One Dozen in a Package

MARSWELLS GROCER SCALES

Double Brass Notched Beam, Nickel Plated, Full Capacity of Scale 250 Lbs., Full Capacity of Beam 60 Lbs., Each Bar marked on Both Sides, Lower Bar in ½ Lb. marks to 30 Lbs. Upper Bar in Ounces to 11 Lbs.

Nos	Platform, In.	Scoop	Weight, Lbs	Each
2850	12x15	Tin	90	$24.00
2870	12x15	Brass	90	25.00

Triple Brass Beam, Full Capacity, Sliding Poises, Lower Bar marked on Both Sides in ½ Lb. marks to 50 Lbs. Middle Bar marked on Both Sides in single Lb. marks to 50 Lbs. Upper Bar marked on Both Sides in 1 Oz. marks to 10 Lbs., Full Capacity of Scale 110 Lbs. entirely on Beam, No Loose Weights.

Nos.	Platform, In.	Scoop	Weight, Lbs.	Each
2950	10½x13½	Tin	80	$24 00
2970	10½x13½	Brass	80	25 00

CANDY AND SPICE SCALES

MARSWELLS

Double Brass Beams and Brass Scoop: Front Bar graduated in ¼ oz. marks to ½ capacity of Scale, Back Bar graduated in ½ Lb. Notches to ½ Capacity of Scale.

No	Cap. Lbs	Wt Ea., Lbs	Each
3580	4	15	$12 00

MEAT AND BUTTER SCALES

MARSWELLS

10x12 in. Marble Plate. Solid Brass Beam marked in ½ Oz. to 3 Lbs. Each Bar of Double Beam marked the same

Nos.	Cap., Lbs.	Wt. Ea. Lbs.	Description	Each
3210	36	45	Single Beam	$12 00
3211	36	49	Double Beam	13.00

MARKET SCALES

TURNBULL

14½x11½ in. Marble Plate, Black Finished Iron Body, Cast Steel, Height 9 in., 7 in. White Dial with Glass Sash. For Weighing Butter, Lard, Meat, Etc.

Nos.	Cap., Lbs.	Wt. Ea., Lbs.	Each
33	32 by 1 Oz	48	$16.00
43	64 by 2 Oz.	50	18 00

SCALE WEIGHTS

Iron Sealed

FOR EVEN BALANCE SCALES

Sizes, Oz.	½	1	2	4	8	16	32	64
Each	$0.15	.15	.15	.15	.30	.30	.45	.75

FOR PLATFORM SCALES

Sizes Lbs.	50	100	200	300	400	500
Each	$0.30	.30	.45	.60	.75	.90

Loose Stock

MARSWELLS DORMANT WAREHOUSE SCALES

Double Iron Pillars and Cap. Extra Heavy Brass Beam. Platform Seasoned Hardwood Lumber. Built Complete ready to set in Floor.

Nos.	Capacity Lbs.	Platform Inches	Shipping Wt. Lbs.	Double Beam Each	Single Beam Each
30	5000x½	46x52	1550	$180.00	195.00
29	4000x½	46x48	1250	170.00	185.00
28	3500x½	46x42	810	125.00	140.00
27	3500x½	46x37	810	125.00	140.00
26	3000x½	46x37	800	120.00	135.00
25	2500x½	46x42	760	115.00	125.00
24	2500x½	46x37	740	105.00	115.00
23	2000x½	30x39	700	100.00	110.00
22	1500x½	30x39	500	95 00	105 00

Not Carried in Stock; F. O. B. Factory with Duluth Freight Allowed

MARSWELLS WHEELBARROW SCALES

Metal Construction Throughout; Solid Brass Beam marked in ½ Lb. marks to 100 Lbs. and furnished with Sliding Poise. A Set of Inclines included with each scale.

WITHOUT WHEELS

Nos.	Capacity Lbs.	Platform In.	Ship. Wt. Lbs.	Each
1690	1000	42x30	750	$70.00
1690	1500	42x30	775	80.00

Above Scales furnished With Wheels at $5.00 List increase over above Lists

Not Carried in Stock; F. O. B. Factory
Duluth Freight Allowed

Sterling Silver Table Ware

Martha Washington Pattern. Bright Finish. Illustrations are Exact Size

Martha Washington Pattern

Bright Finish

		Prices Per dozen.
6230	Tea Spoons, Medium	$21 75
*6231	Tea Spoons, Heavy	26 75
6232	Tea Spoons, Extra Heavy	31 75
6233	Dessert Spoons, Medium	48 00
6234	Table Spoons, Medium	64 25
6235	Soup Spoons	48 50
6236	Dessert Forks, Medium	48 00
*6237	Table Forks, Medium	64 25
6238	Dessert Knives	56 00
*6239	Table Knives	63 00
6240	Bouillon Spoons	37 75
6241	Butter Spreaders	45 50
6242	Coffee Spoons, Plain Bowl	14 00
6243	Coffee Spoons, Gilt Bowl	16 75
6244	Orange Spoons	49 00
6245	Oyster Forks	29 00
6246	Salad Forks, Individual	56 00

Single Pieces

Forks

		Prices, Each.
6247	Cold Meat Fork, Plain Tines	$ 7 00
6248	Cold Meat Fork, Gilt Tines	8 00
6249	Salad Fork, Serving, Plain Tines	13 25

Ladles

		Each.
6250	Cream Ladle, Plain Bowl	$ 4 40
6251	Gravy Ladle, Plain Bowl	9 75

Spoons

		Prices, Each.
6252	Berry Spoon, Plain Bowl	$11 75
6253	Berry Spoon, Gilt Bowl	13 25
6254	Olive Spoon, Plain Bowl	3 50
6255	Preserve Spoon, Plain Bowl	8 75
6256	Salad Spoon, Serving, Plain Bowl	13 25
6257	Sugar Spoon, Plain Bowl	3 50
6258	Sugar Spoon, Gilt Bowl	4 20

Miscellaneous

		Each.
6259	Butter Knife	$ 5 25
6260	Pie Server	6 25
6261	Sugar Tongs	4 40

*Articles Illustrated.

We will gladly quote prices on any article in this pattern not listed.

Let us quote you on Oak chests of Sterling Silver Table Ware in this pattern in any combinations you desire.

We Will Promptly Replace Any Article Not Exactly as Represented.

"THE HOUSE OF QUALITY"

MATCH SAFES

PLAIN Per Dozen
No. 3 Plain Nickel Plated
Size 1⅝x2⅝ in.; Spring Cover $1 50

MINER'S ROUND
Size 2⅞x¼ in., Air Tight Telescope Box with Friction Cover
Per Dozen
No. 4—Aluminum Satin Finish $1 50
No 5—Nickel Plated Brass 1 50

WATERPROOF
Size 2½x⅞ in., Bottom of Box is Threaded and Screws into Collar, attached to Arms
Per Dozen
No. 6—Nickel Plated Brass $6 00

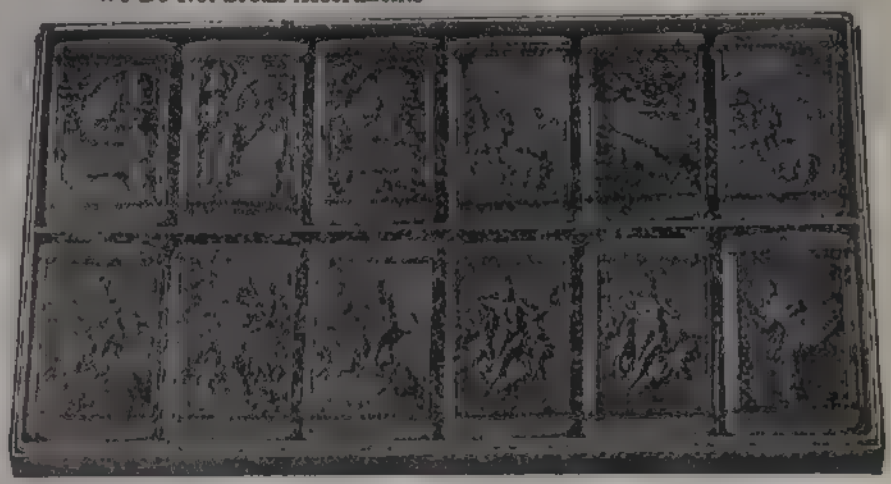
KING KLIP CIGAR LIGHTER
Size 2¼x1⅝ in., Friction Wheel rubbing against piece of Cerium Flint produces a spark which ignites the Lighter. It is worked by the opening of the top cover, which is released by the pressure of the thumb upon button Per Dozen
No. 7 Nickel Plated $9 00

One Dozen in a Box

MATCH SAFE ASSORTMENTS

We Do Not Break Assortments

Cut shows Full Size Match Safe



Cut shows Complete Assortment

SPORTSMAN'S MATCH SAFE ASSORTMENT — Per Assortment

No. 450S Assortment consists of One Dozen Sportsman's Match Safes; Made of White Metal, Sterling Finish, Eight Different Designs, Size 2¾x1¼ in., Match Igniter on Bottom $4 50

Each Assortment in a Hinged Box

Cut shows Full Size Match Safe

Cut Shows Complete Assortment

SOCIETY EMBLEM MATCH SAFE ASSORTMENT — Per Assortment

No 450E—Assortment consists of One Dozen Society Emblem Match Boxes made of White Metal, Fancy Finish; Two Each, Masonic, Knights of Pythias, Odd Fellows, Eagles, Foresters and Royal Arcanum Size 2¾x1¼ in., Match Igniter on Bottom $4 50

Each Assortment in a Hinged Box

Note—Society Emblems can be furnished all One Pattern if desired

FIELD AND MARINE GLASSES

Achromatic Lenses are formed by a Combination of a Double Convex Lens of Crown Glass and a Plano-Concave or a Concavo-Convex Lens of Flint Glass; Objects looked at through these Lenses are perfectly clear and distinct, the outlines being free from rainbow colors and haziness. The word Lignes used in Descriptions refers to the Diameter of the Object Glasses; 12 Lignes are Equal to One Inch.

The Strength of a Glass is determined by the effect upon the object looked at; for instance, if a glass brings an object that appears to be only one mile away, it is a five power Glass; the average Field Glass is about 3 to 5 Power.

8 POWER BUSCH PRISM BINOCULARS

For Long Range, With Shoulder Strap

Will bring an object One Mile Away within 200 Yards

Powerful Glasses for Sight Seeing, Big Game Hunting and Sporting Purposes. Watch Races at Long Distance. Unsurpassed for Ocean Travel; there are none better made. Such Powerful Glasses Should be Used by Ranchmen and Sheep Herders many Miles Travel and Sometimes Will Bring Within Shooting Distance Marauding Stock or Detecting Wolves and Coyotes.

Each

No. 8—Black Morocco Covered Aluminum Body, Extra Strong Frame, Highest Grade Lenses; Length Closed, 4½ in.; Leather Shoulder Strap. Adjustable on Center Hinge to Fit Width of Face. Guaranteed Absolutely Reliable. Repairs or Set or Change Lenses Cheerfully Made. Weight 11 Ozs. Each $27 00

In Leather Case. Weight 11 Ozs. Each .....

HIGH POWER, SHORT MODEL FIELD

With Shoulder Strap

Will bring an object 5 miles away, within 1 Mile

Especially suitable for Surveyors and Engineers who want a compact Glass of High Power and Large Field, for constant use without getting out of adjustment.

Each

No. 19—19 Lignes; Black Morocco Covered Body, High Power Achromatic Lenses, Length Closed, 5½ in. $25 00

In Leather Case, Weight 1 Lb. Each .....

The pleasure of watching Yacht, Horse, Automobile Races and Field Sports is doubled with a Field Glass. On board Ship or Yacht, a Glass is indispensable.

All with Shoulder Strap

LEMAIRE FIELD

Each

No. 24—24 Lignes, Black Morocco and Japanned Tops and Bars, Twelve Highest Grade, Large Size Achromatic Lenses, Length Closed, 6 in. $62 20

Weight 21 Ozs. Each .....

With Six Highest Grade Achromatic Lenses, otherwise same as above

Each

No. 21—21 Lignes; 5 Power; Weight 1⅝ Lbs. $22 70

No. 124—24 Lignes; 5 Power; Weight 1¾ Lbs. 36 40

One in a Leather Case

COLMONT FIELD

Each

No. 224—24 Lignes; Black Morocco and Japanned Tops and Bars, 8 Power, Superior Achromatic Lenses, Length Closed, 6 in. $13 60

One in Sole Leather Case, Weight 1¾ Lbs. Each

MARCHAND FIELD

Each

No. 324—24 Lignes; Black Morocco, Japanned Tops and Bars, Oxidized Tubes, Nickel Bands; Extra Large, Sunk Eye Pieces, Six Achromatic Lenses; Movable Sunshades, Length Closed 5⅛ in. $10 00

One in Velvet Lined Case, Weight 1¾ Lbs. Each

MEAT CLEAVERS

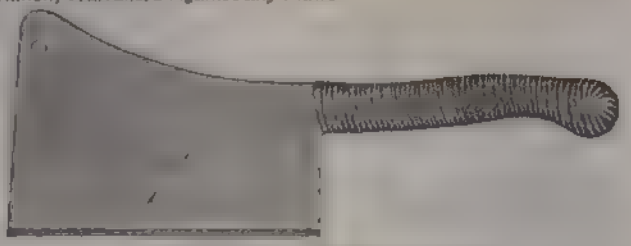
Made of the Finest Tool Steel, by the Best Workmen, Warranted Against any Flaws

ZENITH, HICKORY HANDLE

Butchers', Heavy Steel; Varnished Hickory Handle

Nos.	0	1	2	3	4	5	6
Width Cut, In.	7	8	9	10	11	12	13
Weight Doz., Lbs.	29	36	42	50	59	69	76
Per Dozen	$14.00	16.50	19.00	21.50	24.00	27.00	30.00

Half Dozen in a Box



ZENITH, TWINE BOUND HANDLE

Butchers', Extra Quality, Twine Bound, Iron Handle

Nos.	87	88	89	90
Width Cut, In.	7	8	9	10
Weight Dozen, Lbs.	39	45	54	65
Per Dozen	$17.50	20.00	22.50	25.00

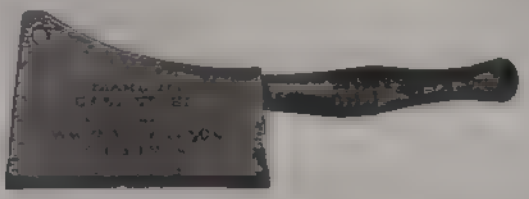
Half Dozen in a Box

ZENITH, FLAT HANDLE

Butchers', Extra Quality Cast Steel, Riveted Stained Hardwood Handles

Nos.	038	039
Width Cut, In.	8	9
Weight Dozen, Lbs.	36	42
Per Dozen	$17.00	20.00

Half Dozen in a Box



DIAMOND KITCHEN CLEAVERS

Household, Solid Steel, Polished and Tempered; Hardwood Handles, Stained; ¾ in. Strong, Steel Ferrule.

Per Dozen

No. 85—6½ in. Cut, Weight 10½ Lbs., per Dozen $7 50

One Dozen in a Box

CHOPPING OR MINCING KNIVES

CLIMAX

Per Dozen

No. 25—5½ in., Polished Steel Blade, Heavy Shoulders and Tangs, well Fastened in Beech Wood Handle....$6 00

Half Dozen in a Box

Weight 4½ Lbs. per Dozen

DOUBLE BLADE, BOWED

Per Dozen

No. 200—Two 6 in. Polished Steel Blades, Tinned Cast Iron, Bowed Shanks, Rosewood Handle $4 00

Half Dozen in a Box

Weight 5 Lbs. per Dozen

SENSIBLE

Japanned Cast Iron Handle, Nickel Plated Removable Steel Blades, a fast and clean Cut

Per Dozen

No. 10—One 5 in. Blade..... $2 25

No. 40—Four Blades, 2 in. from Center to Edge 3 00

No. 60—Six Blades, 2 in. from Center to Edge 4 50

One Dozen in a Box

Weight 4½, 5½ and 7 Lbs. per Dozen

SINGLE BLADE

Per Dozen

No. 13—6 in. Polished Steel Blade, Japanned Hollow Cast Iron Handle; a Stiff, Strong Cutter..... $3 00

Weight 7 Lbs. per Dozen

DOUBLE BLADE, YOKED

Per Dozen

No. 15—Two 5½ in. Polished Steel Blades, Riveted to Malleable Shank, Oiled Wood Handle.....$2 40

Weight 3¾ Lbs. per Dozen

One Dozen in a Box

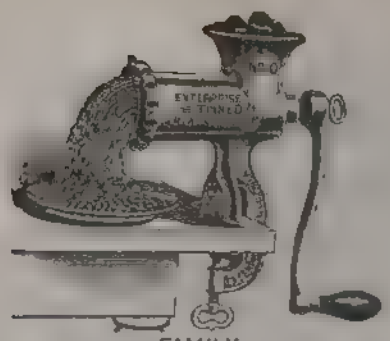
SINGLE BLADE, YOKED

Per Dozen

No. 35—6¼ in., Steel Blade, Malleable Shanks, Plain Wood Handle $1 80

Weight 3½ Lbs. per Dozen

ENTERPRISE MEAT CHOPPERS

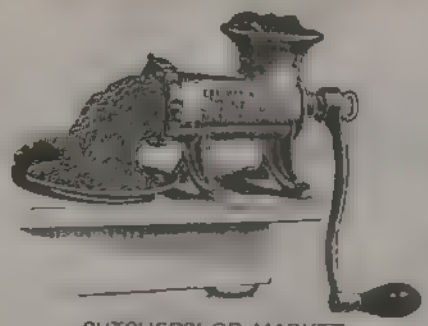


FAMILY

2 in. Camp Opening. Size of Outlet Holes 1/8 in., a Strong and Efficient Chopper

Nos	5	10
Capacity Lbs. Minute	1½	3
Height, In.	6⅝	7½
Diam. Hopper, In.	3⅝	4⅝
Diam. Barrel, In.	1⅞	2⅜
Weight Each, Lbs.	4⅝	8¾
Each	$1.75	2.50

Half Dozen in a Case



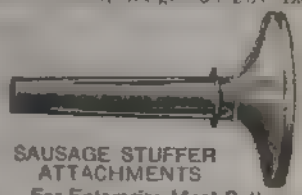
BUTCHERS' OR MARKET

Screws to Table, takes 4 No. 14 Screws; ⅜ in. Outlet Holes, Adapted for Farm and Hotel Use etc.

Nos	12	22
Capacity Lbs. Minute	4	4
Height, In.	6⅞	7⅛
Diam. Hopper, In.	4⅜	5½
Diam. Barrel, In.	2⅜	3
Weight Each, Lbs.	9	14
Each	$2.25	4.00

BUTCHERS OR MARKET Each No. 242 [illegible] Grinder as No. 32 with 20 in. Fly Wheel, with [illegible] $8.00

One in a Box, Weight 38 Lbs. Each



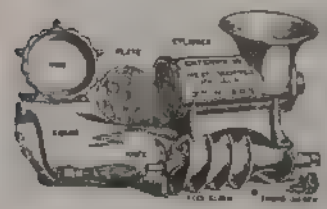
SAUSAGE STUFFER ATTACHMENTS

For Enterprise Meat Cutters

Nickel Plated Steel Brass, ¾ in. Corrugated Spout prevents Air from entering Sausages.

Nos	10A	12A	22A
Cutter Nos.	10	12	22
Weight Dozen, Lbs.	1¼	1⅝	2
Per Dozen	$6.00	6.00	7.50

Open Stock

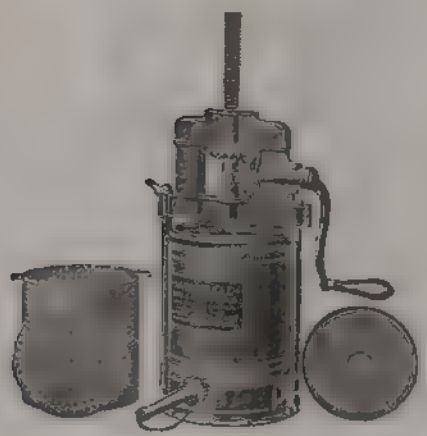


EXTRA PARTS FOR ENTERPRISE MEAT CHOPPERS

Machine Nos.	5	10	12	22	32	232
Knives	$0.15	.18	.18	.25	.40	.40
Plates, Holes ⅜ in. or Larger	.20	.35	.35	.50	.65	.65
Plates, Holes ¼ in.	.40	.50	.50	.65	1.30	1.30
Plates, Holes ⅛ in.	.60	.75	.75	1.00	2.00	2.00
Cranks, Thumb Screws	.10	.15	.15	.15	.20	.20
Cranks	.18	.20	.20	.35	.50	.50
Rings	.18	.25	.25	.50	.65	.65

Note—When Attaching to Iron or Stone Counter, put piece of Leather under each leg.

FRUIT AND LARD PRESSES



UNIVERSAL

Made of Steel; Ball Bearings, Screw Movement. Top can be swung out for easy filling. Lipped Tin, Inside Cylinder prevents burning hands when removing contents

Nos.	44	66	88
Capacity	4	6	8
Height	18	18	21
Weight	41	60	77
Each	$5.50	6.25	7.50

One in a Box

INDEPENDENT, QUICK ACTION

All Parts requiring Strength are Cast Iron and Steel, the Outside Cylinder and Colander are Heavy Tin Plate, Enameled; a few turns of the Bar gives the [illegible] pressure; the Sausage [illegible] Attachment which is furnished [illegible] additional Cost adapts it for Stuffing Sausages.

No.	2	4	6
Capacity	3	4	6
Weight	[illegible]	5	12
Each	$3.00	3.60	5.00
Sausage Stuffing Attachments Each	$1.10	1.50	

SAUSAGE STUFFERS

PERRY

Japanned Cast Iron Heavy Tin Spout, 7½ in. High, 23 to 25 in. Lever Handle. Screws to Bench, Two Sizes, Family and Butcher

Nos	1	0
Height Body, In.	7	7½
Length Body, In.	4½	4¾
Weight Dozen, Lbs.	Full	Full
Per Dozen	$15.00	21.00

Half Dozen in Case

HAVEN RAILROAD

Per Dozen

No. 1H—Length Closed 11½ in. Japanned Cast Iron Frame, Heavy Tin Cylinder, Diam. 3⅛ in.; Tin Spout, Capacity 3 to 4 Lbs. of Meat, Screws to Bench or Table for Hotel or Family Use....$15.00

One Dozen in Case

Weight 120 Lbs. per Dozen

DRIED BEEF SHAVERS

No. 23 17½ in. High, 10 in. Long, Japanned Iron Frame; 12x3 in. Steel Knife with [illegible] Automatic Feed can be regulated for Slices from ⅛ in. to Tissue Thick.... $8.00

Open Stock; Weight 25 Lbs. Each

The War of 1913

The Fierce Fight Raging Among 40-Horsepower Cars

72 Rivals in It

We are nearing the climax in the fiercest fight that Motordom has ever known.

72 makers of cars around 40 horsepower are contending in a fierce struggle for supremacy.

The chief interest centers around six of these cars. For six leaders, backed by millions of money, are each seeking to dominate this great middle field.

The Michigan "40" is one of these six. The ablest engineers have spent four years to fit it for this fight. And it comes this year to claim first place in all this Forty class.

How the War Began

The trend of the times is toward luxurious Forties.

Owners of small cars come to want more power, more comfort, more room, more appearance. Owners of oversize cars come to want more economy.

So the demand for Forties, in recent years, has become overwhelming.

To meet that demand, 72 makers have taken up Forties. Hundreds of the ablest engineers have centered their genius in them.

Today the finest cars ever built in America belong to the Forty class.

Prices Cut in Two

One result has been to bring out in these cars all the best improvements of the past few years.

Another has been to develop comfort and luxury, beyond anything dreamed of a few years ago.

Another result shows in splendid equipment. Each maker has sought to outrival the others. Some cars at twice the price are not equipped like the modern Forties.

But the greatest result is the cutting of prices. Some makers' prices have been cut in two. Forties are selling, with splendid equipment, for what stripped Thirties used to cost.

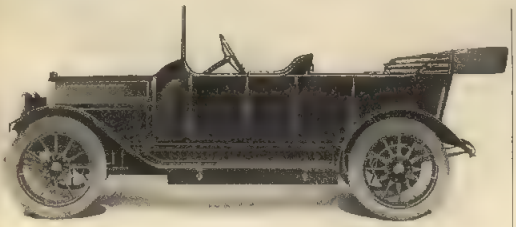
The car which gives the greatest value is bound to win this contest. And every maker knows it.

In quality, equipment, comfort and luxury there are limits beyond which none can go. These limits are reached in the Michigan "40."

Then comes the question of factory efficiency. Who can build such cars for the lowest price? Who dares accept the smallest profit?

Big Saving to Buyers

So this war of the Forties means enormous savings to men who watch out and compare. Cars in no other class match the Forties in value. All because there are 72 makers fiercely fighting for favor with 40-horsepower cars.



Michigan "40" Equipped $1,585

Michigan "40"

Four Speeds
Extra-Tired
Electric Lighted
Equipped With Every Modern Feature

$1,585

No. 174
PRESSED STEEL or SOLID BRASS SASH LOCKS

The above illustration shows our new Sash Lock. This is made of the best quality of Cold Rolled Steel and furnished in any of the plated finishes. This Sash Lock is also made in Solid Brass.

We call your attention to the up-to-date construction of this Sash Lock, namely the manner in which the spring is fastened. It is impossible for it to come off.

This Lock will positively pull the windows together. Packed one dozen in a box, with screws.

Complete catalog on request

Manufactured by

LAWRENCE BROS.

Sterling, - - - Illinois

ADOLPH KASTOR & BROS.

109 & 111 Duane Street, New York

MANUFACTURERS AND IMPORTERS OF

CUTLERY

SOLE AGENTS

W. H. MORLEY & SONS

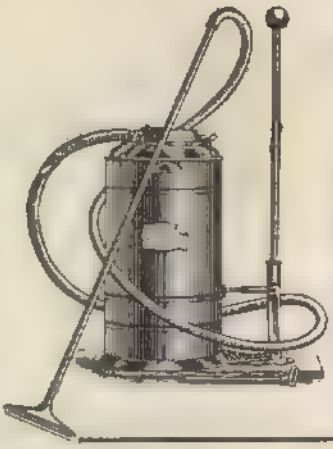
[illegible] Pocket Knives, Scissors and Razors

WADE & BUTCHER'S Celebrated Razors

THOMAS WILSON, Butcher Knives.

AMILLUS C. TERRY COMPANY'S American Pocket Knives

WE SELL TO THE JOBBING TRADE ONLY



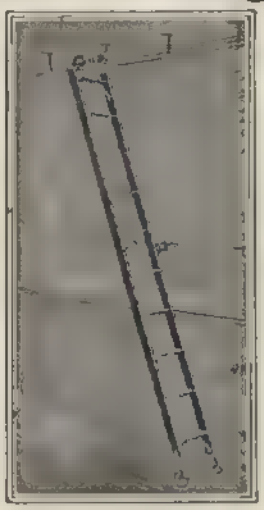
The Crown Vacuum Cleaner

An $18.00 handpower vacuum cleaner that will do the work of the highest price machines. Built to give thorough satisfaction and last a lifetime.

We want dealers to write us for exclusive territory proposition and complete details.

GRAY IRON FOUNDRY CO.
Reading, Pa.

Milbradt Rolling Step Ladders



HAVE been long and favorably known for their satisfactory service. They are shipped on approval and guaranteed in every respect.

The ladder here shown is specially adapted for use in hardware stores or where heavy goods are to be handled.

Write for catalogue which shows a great many other styles, suitable for all kinds of shelving and stores.

Milbradt Manufacturing Company
1444 N. Eighth St. ST LOUIS, MO.

SANITARY

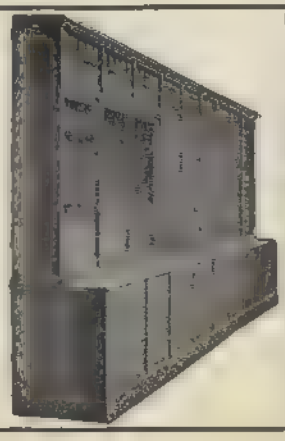
walls are as necessary as sanitary plumbing

ENAMETILE

is the best and most sanitary wall. Is made of metal enameled. Like ceramic tile, but better because lighter, does not crack and costs about ½ as much. Hard to detect difference. Panels bedded in cement, no lap joints, no nails. Endless variety of patterns, colorings and sizes.

Write for ART PORTFOLIO showing Enametile in colors, and Metal Ceiling Catalog showing patterns for all purposes. FREE!

N. Y. Metal Ceiling Co., 543, &c., W. 24th St NEW YORK CITY



THE BEST Hardware Shelving IN THE WORLD

Send for Catalog

W. C. Heller & Co.

MONTPELIER
OHIO, U. S. A.

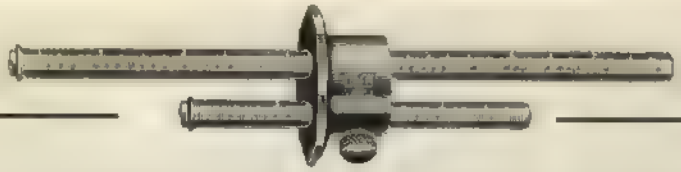
BRANCH
220 Wyandotte Street
KANSAS CITY, MO.

No Side Friction

In these bent floor-track "Bicycle" ladders the weight comes directly over the wheels. This eliminates side friction and makes them run easily. Our booklet tells all about this and more interesting features.

Use a Postal

Bicycle Stepladder Co.
62 Randolph Street
Chicago :: :: Ill.



BUY *Goodell-Pratt's* ROLLER GAUGES

SINGLE, DOUBLE AND TRIPLE BEAM

GOODELL-PRATT COMPANY

GREENFIELD, MASS., U. S. A.

Toolsmiths

The New "YANKEE" Plain Screw Drivers

No. 90 & 95

Strong, durable, well-balanced tools, of the same high quality of material and workmanship as other "Yankee" Tools, which to-day are without equal.

The blade and ferrule are highly polished, the handle of hard wood finished in dull black, making a handsome appearance.

Each tool is thoroughly tested and the blades are positively guaranteed not to turn in the handle.

ASK YOUR JOBBER

NORTH BROS. MFG. CO.
PHILADELPHIA, PA.

Nobody Ever Changes From a
SLOCOMB
Micrometer To Any Other

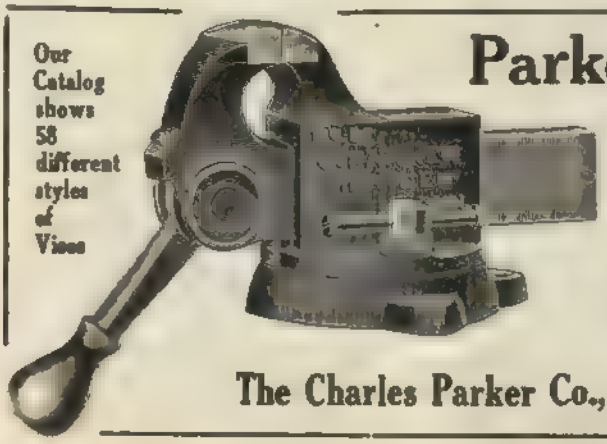
The reason is the adjustment. There is no micrometer that has so simple and effective an adjustment. If you don't understand it you should because it's a valuable point in selling tools. It will help you to explain why the **Slocomb** is

THE LONGEST LIVED MICROMETER ON THE MARKET

If You Haven't One of Our New Catalogs No. 13 E Send for it.

J. T. SLOCOMB CO.
PROVIDENCE, R. I. -:- U. S. A.

Our Catalog shows 58 different styles of Vises



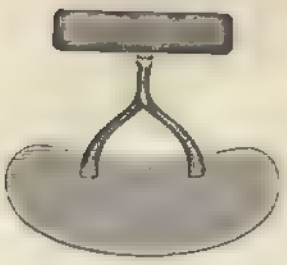
Parker's Quick Action Swivel Vise

Hardware stores report a large sale of this handy vise for quick work. The sliding jaw can be moved instantly to any position and the vise swivels so easily that difficult work is handled without the usual trouble and annoyance common to most vises. It is made of Semi-Steel and every part carries the Parker guarantee of strength and endurance. It's the favorite vise in thousands of work shops.

Send for Special Vise Catalog No. 5.

The Charles Parker Co., Meriden, Conn., and 32 Warren St., New York

MINCING KNIVES



No. 80

No. 280

No. 102

No. 80. Beech handle, one blade, per dozen . . . $1 00
No. 280. Beech handle, two blades, per dozen 1.40
One dozen in a box

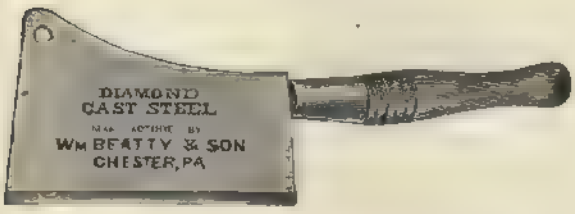
No. 102. Beech handle, two blades, per dozen . . . $2.15
One half dozen in a box

No. 125. Beech handle, per dozen $4 25
One half dozen in a box

No. 224. Red handle, per dozen $5 75
One half dozen in a box

KITCHEN CHOPPERS

DIAMOND



Solid steel, tempered, narrow oval handles, strong burnished ferrule, riveted tang.

No. 85. Width of bit 6¼ in., per dozen $7.50
One dozen in a box

BUTCHERS' CHOPPERS

WM. BEATTY & SONS

Varnished hickory handles, extra heavy steel

Nos.	28	29	30	31	32
Size	000	00	0	1	2
Inches	6	7	8	9	10
Per dozen	$13.00	14 50	16.00	18 00	20 00

One half dozen in a box

IRON HANDLE CLEAVERS

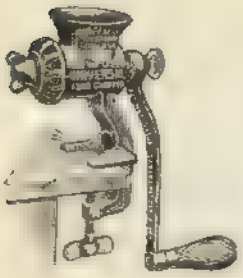
WM. BEATTY & SONS

Handle wrapped with braided cord

Nos.	88	89	90	92
Width of cut, in.	8	9	10	12
Per dozen	$20.00	22,50	25 00	31 50

UNIVERSAL FOOD CHOPPERS

Tinned, All Parts Interchangeable

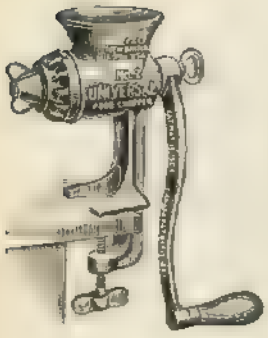


Small Family Size

No. 0. Each .$1.80

Diameter of hopper, 2½ x 2⅜ in.; diameter of barrel, 1½ in., has 7 cutting teeth inside the barrel, weight, 3 lbs. each. Furnished with 3 cutters—coarse, medium and fine. Chops 1½ lbs. of meat per minute.

Six in a case

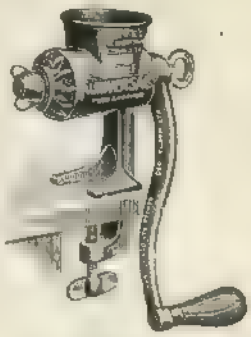


Large Family Size

No. 2. Each $2.25

Diameter of hopper, 4 x 3 in.; diameter of barrel 2 in., has 7 cutting teeth inside the barrel; weight, 4¼ lbs. each. Furnished with 3 cutters—coarse, medium and fine. Chops 2½ lbs. of meat per minute.

Six in a case



Family Size

No. 1. Each . . $2.00

Diameter of hopper, 3 x 2⅜ in., diameter of barrel, 2 in. has 7 cutting teeth inside the barrel, weight, 4½ lbs. each. Furnished with 3 cutters—coarse, medium and fine. Chops 2 lbs. of meat per minute.

Six in a case

Hotel Size

No. 3. Each $3.00

Diameter of hopper, 5 x 4 in., diameter of barrel, 2⅜ in., has 7 cutting teeth inside the barrel; weight, 8 lbs. each. Furnished with 4 cutters—very coarse to very fine. Chops 3 lbs. of meat per minute.

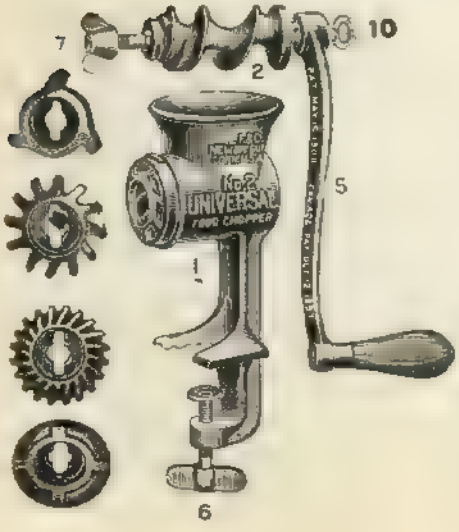
Six in a case

STUFFING ATTACHMENTS FOR THE UNIVERSAL FOOD CHOPPERS

The Nos. 2 and 3 machines are so made that a stuffing attachment may be used when desired.....per dozen, $4.50

The attachment is made of one piece of seamless brass tubing spun into the shape required and heavily nickel plated

UNIVERSAL FOOD CHOPPER PRICE LIST OF PARTS



	Nos.	0	1	2	3
1	Body	$0.75	$1.00	$1.00	$1.50
2	Forcer	.35	.50	.50	.60
3A	Coarse	.15	.15	.15	.25
3B	Medium	.15	.15	.15	.25
4	Pulverizer	.15	.15	.15	.25
5	Crank	.20	.25	.25	.30
6	Clamp screw	.13	.13	.13	.20
7	Thumb nut	.10	.10	.10	.10
8	Nut butter grinder	..	.20	.20	
1	Thumb screw	.10	.10	.10	.10

MINERS' LAMPS

TRETHAWAY BROS.

Medium Coffee Pot, Double Spout
Brass Collar with Tube

No. 102. Tin, plain, per gross $ ..
No. 102. Brass, plain, per gross ..

Single Spout
Brass Collar with Tube

No. 102. Tin, with cup, per gross $....
No. 102. Brass, with cup, per gross ....

Large Coffee Pot, Double Spout
Brass Collar with Tube

No. 103. Tin, plain, per gross...$. ..
No. 103. Brass, plain, per gross.. ....

DUNLAP'S

Single Spout

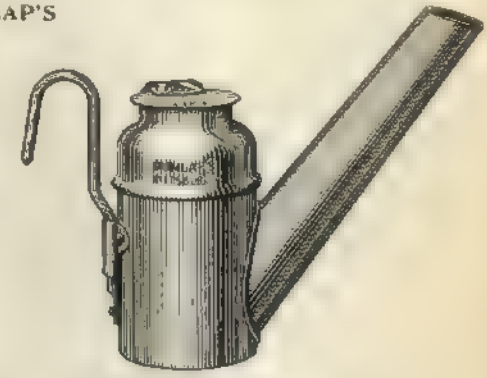
No. 103. Tin, with cup, per gross.$....

No. 103. Brass, with cup, per gross ..

New construction seamless bodies and breasts. Double seamed spouts. Hooks reinforced.

No. 1. Dunlap's Pittsburgh Miners' Lamps, per dozen..... .$....

One dozen in a box



Seamless, cannot be melted apart Hooks riveted and reinforced

No. 3. Dunlap's Drivers' Lamps, per dozen .....$

Copper Lined, Brass Collar

No. 04. Miners' Sunshine Lamps, 1⅝ in. bottom, 2 in. high, per gross.....$

Copper Lined, Brass Collar

No. 05. Drivers' Sunshine Lamps, 2 in. bottom, 2" in. high, per gross..... .$. ...

WALL TORCHES

GASOLINE

No. 20. Capacity 6 quarts, each . . $1.50

The tank is made of heavy tin, the burner produces a light equal to eight or ten gas lights, and the expense of running approximates about 1 cent per hour

Stuffing boxes are fitted to the burner and valve needles, making them always tight and safe.

BLOW TORCHES

CLAYTON & LAMBERT

No. 31

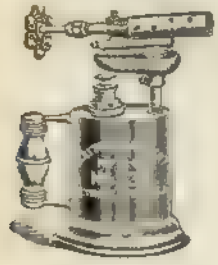
No. 31. Capacity, 1 quart, each. $7 50

The No. 31 has no equal where intense heat is desired. Produces a perfect fire, whether used indoors or out, in windy or zero weather. The burner is made of special generator metal which holds the heat longer, producing perfect combustion, and is of the improved type, having a superheated chamber for the gas and also protecting the orifice through which the gas passes into the burner. Cleanout plugs in the burner give easy access to the generating chamber in case dirt in the gasoline should clog the tube. Fitted with automatic brass pump in tank, the check valve of which insures abundant air pressure at all times, being actuated by springs, and provided with removable cork seat. The tank is made of 18 gauge seamless drawn brass, with concave brass bottom, and is strong and durable. Fully tested and guaranteed

No. 32

No. 32. Capacity, 1 quart, each.....$8.00

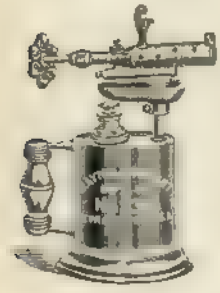
The No. 32 is exactly like No. 31 except that it has hook and support to hold a soldering copper. The burner, which is made of special generator metal, retains the heat longer, and greatly aids in producing an intensely hot blue flame. It burns perfectly in stormy weather or extreme cold, and owing to the construction of the burner, provides protection for the orifice through which the gas passes to the burner tube. The special generating chamber superheats the gas before it is burned and is fitted with cleanout plugs which greatly facilitates cleaning the burner, should it ever become clogged from impurities in the gasoline. Has patented pump in tank which is provided with automatic check, actuated by springs which quickly supplies the air pressure required. The pump is easily removed from the tank to clean or make repairs.



No. 37

No. 37. Capacity, 1 pint, each.....$6 50

The burner is constructed of special generator metal which holds the heat longer and produces a perfect blue flame of great heat intensity. The orifice through which the gas passes is shielded by the burner tube and this protection insures a hot blue flame which burns steadily in windy or extreme cold weather. The gas is superheated before it is burned and the gas chamber is fitted with clean-out plugs so that in case sediment in the gasoline should clog the burner, it can be easily removed. The C. & L. patented brass pump in the tank is provided with double spring automatic check valve, which insures at all times ample air pressure. The tank is made of 18 gauge seamless drawn brass, with heavy concave brass bottom.



No. 38

No. 38. Capacity, 1 pint, each.....$7.00

It has an improved burner, which shields the gas from wind or cold and produces a steady blue flame, and is made of special generator metal which holds the heat longer, producing the maximum degree of heat, and fitted with hook and support to hold soldering copper. The tank is made of 18 gauge seamless drawn brass with concave brass bottom. Equipped with patented automatic brass air pump, provided with an automatic check valve actuated by springs, which quickly supplies the air pressure. The cork seat is removable and in case of necessity is easily replaced.

No. 49

No. 49. Capacity, 1 quart, each.....$4.50

This is a well made torch and for the price it has no equal. It has a good burner mounted in the center of the tank.

MINERS' TOOLS

BREAST AUGERS

No. 300. Size 6 ft. by 1¼ in., length twist 4 ft.. .....per dozen, $

CHURN DRILLS

Churn Drills, size 6 ft. by ⅞ in., with copper end.. .....per dozen, $12.00

COMBINED TAMPER AND SCRAPER

Copper Tamper

Round, with scraper on one end and tamper on the other

½ in., per dozen.....$6.00 ⅝ in., per dozen $8.00

NEEDLES

Copper

These are drawn gradually to the point, uniform in size, with an exact taper

Needles, size ⅞ in. by 6 ft.....per dozen, $

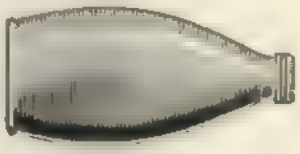
POWELL'S SQUIBS

Powell's Miners' Squibs.....per 100, $

SQUIB CASES

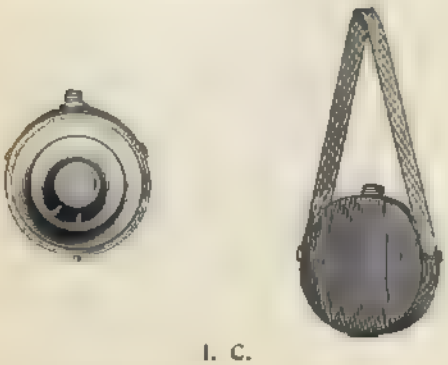
Round, per dozen $
Oblong, per dozen

OIL BOTTLES



1 Pint Pressed bottles, per .....$

CANTEENS



I. C.

No. 3. 1 qt., without straps, per dozen.. $ ..
***No. 3S.** 1 qt., with strap, per dozen..

*Not carried in stock.

MINERS' CAPS

No. 400. 9 sizes, 6¾ to 7¼, made of the best material per dozen .....$

One dozen in a box

OILERS

HOWLAND PUMP OILER

Nos. 302 to 405

The Howland Oiler is made with a pump containing two valves working automatically, which forces the oil to the bearings quickly and in just the quantity desired. With the pump oiler the oil can be applied to machinery while in motion as well as oiling an overhead bearing from the floor. This is the only pump oiler on the market with a union spout connection, the connection being made from bar brass containing cut threads.

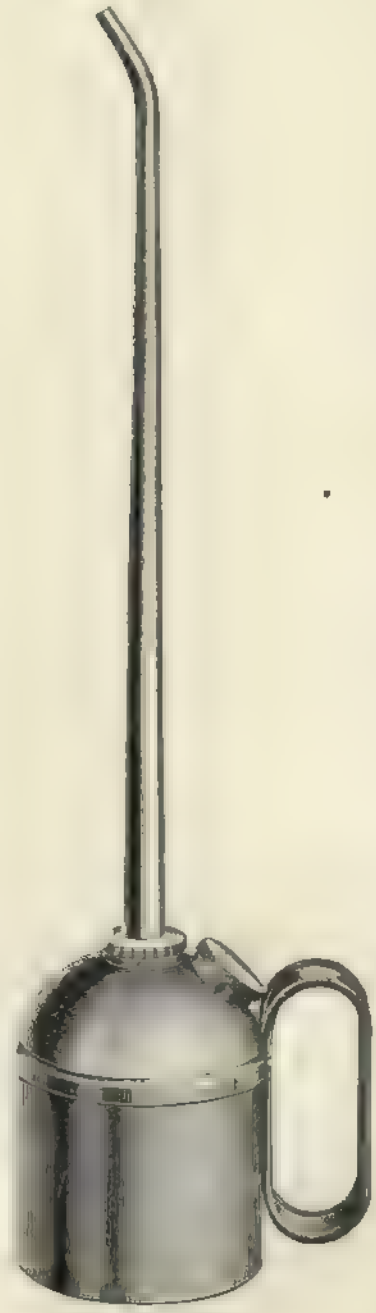
Detachable Spout Tin Pump Oilers

No. 302.	1	pint, 3 in. diameter, 10 in. spout	per dozen, $17.50
No. 303.	1½	pint, 4 in. diameter, 12 in. spout	per dozen, 21.75
No. 305.	2	pint, 4 in. diameter, 16 in. spout	per dozen, 24.25

Detachable Spout Copperized Pump Oilers

No. 402.	1	pint, 3 in. diameter, 10 in. spout	per dozen, $25.75
No. 403.	1½	pint, 4 in. diameter, 12 in. spout	per dozen, 30.15
No. 405.	2	pint, 4 in. diameter, 16 in. spout	per dozen, 32.75

RAILROAD



Copper Plated Steel

No.	Capacity	Diam. Inches	Height Inches	Spout Inches	Per Dozen
10	1 pt.	3⅜	5	12	$14.00
11	1 qt.	4⅛	6	18	18.00

Heavily copper plated inside. Have seamless drawn bodies.

ENGINEER DRIP OILER

Steel

With brass screw filler, cap and vent, polished tin finish, tin spout.

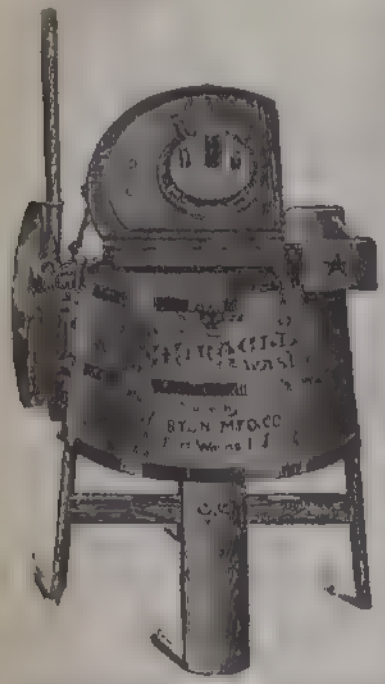
No.	Capacity	Diam. Inches	Height Body Inches	Per Doz
1097	1 pt.	3	5½	$3.75
1098	1½ pt.	3⅝	6	4.25
1099	1 qt.	3¾	6¼	4.50

One-half dozen in a box

Nos. 1097 to 1099

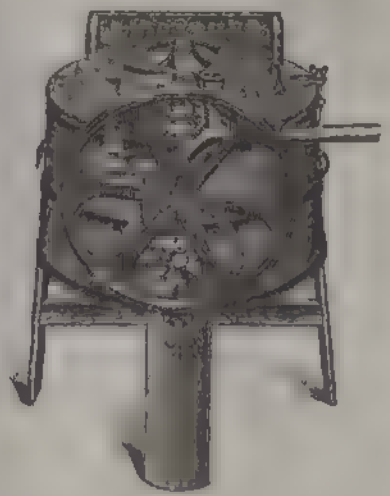
MIRACLE WASHING MACHINES

A Combination Momentum Hand and Power Washing Machine which is so simple operated and simple in its construction that all Wash Day [illegible] eliminated. Extra Heavy Castings and Large Bearings give great strength, [illegible] and take the Washer smoothly and quickly to Heavy Fly Wheel when power is not on has great momentum, reducing the labor of operation to the minimum. By changing the Lever the Operator can either stand or sit, as desired.



Shows how Lid can be lifted without interfering with Gearing; Note the Large Opening giving easy access to interior, the Center of Gravity is near the Hinges, to prevent topping over sideways, as do some Machines, when empty. There are no heavy castings to lift, therefore little effort is wasted in opening Lid. It is not necessary to shut off the power when lifting the Lid, as the Machine always remains in gear.

Shows Machine with Pulley, rigged for a Belt, to run by Gasoline Engine or other Motive Power. Every part is so nicely and perfectly adjusted that there is practically no wear and extras are seldom or never needed. A large number of Farmers and Dairymen throughout the country run their cream Separators, Churns, etc., with a small Gasoline or Gas Engine; they will gladly welcome a Washing Machine which can be run in the same manner



Shows Machine Closed, rigged for Hand Power; Note the two Sockets for Operating Lever which can be inserted either Perpendicularly or Horizontally to permit Operator to sit or stand.

No. 22 Tub is Long Grained Waterproof Louisiana Red Cypress, Natural Finish, Castings are Gold Bronzed, Fly Wheel and Hoops are Green Enameled, Inside Dimensions of Tub, Bottom 25½ Diam. Top 21½ inches Diam. Depth 19 inches, 14 inch Wringer Board, Tub is Corrugated Inside. $13 00

One in a Crate. Weight 100 Lbs. Each

Each

Power Pulley only, to adapt the Washer for use with Gasoline Engine, etc., 8 in. Diam. 2 in. Face, Weight 10 Lbs. $2 50

QUICK EASY WASHING MACHINES

Ball Bearing

This Machine is worked on the high speed principle. The balance wheel is under the Tub and is manipulated by reciprocating gears, there being a primary and secondary leverage which lessens the amount of energy to be exerted on the lever handle, this takes care of the lost motion in maintaining the speed on the Rack and Pinion, thereby almost doubling the amount of work which can be obtained from the machine.

Please notice the Solid Legs and Staves with their strong bracing under the Tub. The Tub is made of Cypress of the very best quality, thoroughly dried and seasoned.

Works easily and quickly, has Supplementary Handle and Foot Pedal so that Machine may be operated while sitting on a chair; Balance Wheel is placed below Tub, out of the way and attains high speed with little effort. Ball Bearings, wherever needed, add to the ease of operation. All Castings are malleable and will not break nor wear out.

Each

Quick Easy—Diameter at Bottom 25 in., Diameter at Top 21 in., Depth 15 in., 20 in. Fly Wheel; made of Best Quality Cypress, Varnished, Light Blue Enameled Castings and Hoops . . $16 00

STEP LADDERS

Norway Pine Sides and Steps Steel Top Fasteners, Steps Fastened with Cement Coated Nails

PIONEER
Without Shelf

Nos.	Length, Ft.	Weight, Lbs.	Each
305	5	12	$1 05
306	6	13	1 20
307	7	16	1 30
308	8	19	1.50

PERFECTION
With 8¼x10½ In. Shelf

Nos.	Length, Ft.	Weight, Lbs.	Each
205	5	13	$1.40
206	6	15	1 60
207	7	18	1 80
208	8	19	2.00

CRESCENT
With 8¼x10½ In. Shelf
Select Clear Norway Pine; Jointed Wrought Iron Braces; Steps 4 in. Wide, Mortised into Standard.

Nos.	Length, Ft.	Weight, Lbs.	Each
106	6	21	$3.00
108	8	27	4.00
110	10	35	5.00
112	12	39	6.00

PAINTERS' STEP LADDERS
Norway Pine, Tops set [illegible] and Bolts to Sides with Steel Corner Plates, Back Standards heavily [illegible] at Connecting Points. Used as Ladder or Trestle, 2 10 in. Plank will slide through any Step.

Nos.	Length, Ft.	Wt., Lbs.	Each
406	6	18	$2.40
407	7	21	2.80
408	8	24	3.20
410	10	30	4.00
412	12	36	4.80

ALL STEEL STEP LADDERS
Unbreakable will never become Loose or Shaky; Painted Green.

Nos	506	508	510	512
Length, Ft	6	8	10	12
Weight, Lbs.	24	32	40	48
Each	$6 00	8.00	10.00	12.00

Open Stock

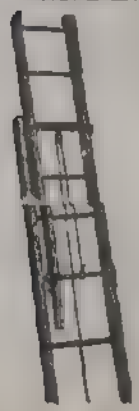
PAINTERS' TRESTLES
Norway Pine, Rock Elm Rungs, fastened at top with Hinge Bolt; very substantially made; 1½x2⅝ in. Sides; 18¾ in Wide, Inside at Top.
Used as Ladder or Trestle by Painters, Paper Hangers and Carpenters.

Nos.	Length, Ft.	Wt., Each Lbs.	Each
606	6	25	$4 80
608	8	32	6.40

Single Taper
Norway Pine Sides, Size 1½x2⅝ in., Rock Elm Rungs

Nos	912	914	916	918	920
Length, Ft.	12	14	16	18	20
Weight, Lbs.	22	27	32	36	41
Each	$2.40	2.80	3.20	3.60	4.00

ROPE EXTENSION LADDERS



Best Norway Pine with Rock Elm Rungs Malleable Iron Locks, has a Roller and Rope Attachment which enables the user to raise and lower the Upper Section by means of the Malleable Iron Crank, as shown in Cut.

Nos	Length, Ft	Wt Each, Lbs.	Each
724	24	21	$8.00
730	30	65	9.50
732	32	70	10.00
736	36	80	11.50
740	[illegible]	[illegible]	12.30

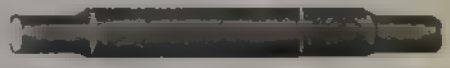
EXTENSION LADDERS
Best Norway Pine, With Rock Elm Rungs, Malleable Iron Locks

The Roller Attachment enables the Upper Section to be raised and lowered much easier than by any other scheme.

Nos	822	824	826	828	830
Length, Ft.	22	24	26	28	30
Weight, Lbs	46	51	55	61	65
Each	$6.60	7.20	7 80	8.40	9 00
Nos	832	834	836	838	840
Length, Ft	32	34	36	38	40
Weight, Lbs.	70	75	80	85	90
Each	$9.60	10.20	10.80	11.40	12.00

All Above, Open Stock

LADDER ROUNDS



For Use in Underground Mines in Making Shaft Ladders

	Per 100
No. 16—Hickory 16 in. Long; 1⅛ in. Swell, Center 1 in. Diameter at Ends	$5 00
No. 15—Standard 16 in. Long, 1 in. Swell Center, 1¼ in. Diameter at Ends	4 50

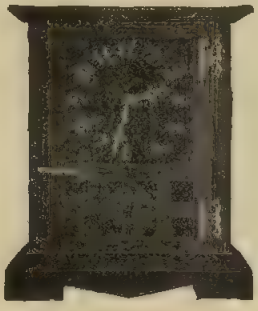
250 in Crate, Weight 30 Lbs. per Crate

High Grade Mission and Iron Enameled Clocks

Guaranteed in All Respects. Made by The New Haven Clock Co.

8497

Solid Oak, Flemish Finish, Height 20 inches, Width 13 inches, 6-inch Wood Dial, White Figures. 8-Day, Half-Hour Strike, Cathedral Gong. Price, each.....**$7 95**



8498

Solid Oak, Flemish Finish, Height 14½ inches, Width 11½ inches, 6-inch Wood Dial, Metal Figures, 8-Day, Half-Hour Strike, Cathedral Gong. Price, each.....**$7 10**

8499

Solid Oak, Flemish Finish, Height 19 inches, Width 12½ inches, 6-inch Wood Dial, Metal Numerals, 8 Day, Half-Hour Strike, Cathedral Gong. Price, each **$7 25**

8500

Black Enameled Iron. Height 9½ inches, Width 8½ inches, 6-inch Ivorine Dial, 8-Day, Half-Hour Strike, Cathedral Gong. Gilt or Bronze Trimmings. Price, each...**$10 00**

8501

Black Enameled Iron. Height 13½ inches, Width 9 inches, 6-inch Ivorine Dial, 8-Day, Half-Hour Strike, Cathedral Gong. Price, each **$14 00**

8502

Black Enameled Iron. Height 11¼ inches, Width 10½ inches, 6-inch Porcelain Dial, 8-Day, Half-Hour Strike, Cathedral Gong. Price, each **$16 25**

If You Are Uncertain About Any of Our Goods, Write us. We will Answer Promptly

Sonora Chime Clocks

American Made. Absolutely Guaranteed

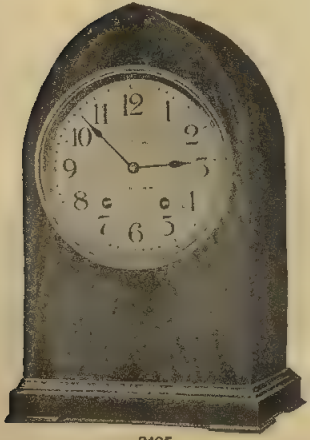
The famous Westminster chime played every 15 minutes, and the Hour struck on four patented resonated bells. This patented chime-mechanism, as used in these clocks, is the result of much thought and experiment in adopting laws for resonated bells, to the limit of space, price and other commercial requirements.

8493

Made by the Seth Thomas Clock Co. Adamantine Mahogany Finish. A durable surface that can be polished when necessary, and will always look like new. Figured Mahogany veneered panels, gold gilt metal columns, brass feet. Height 13½ inches. Base, 16 inches Price **$38 00**

8494

Made by the Seth Thomas Clock Co. Adamantine Mahogany Finish. A durable surface that can be polished when necessary, and will always look like new. Gilt metal feet. Plain sash, 6 inch Silver Dial. 8 day quarter hour strike on four bells Height, 14½ inches. Base 11 inches. Price..... **$36 00**



8495

Made by the Seth Thomas Clock Co. Mahogany, Fine Figured Pattern. Eight-inch, Convex Porcelain Dial, Cast Sash, with Convex Beveled Glass. Height 18 inches. Depth 8½ inches. Price..... **$42 00**

8496

Made by the Seth Thomas Clock Co. Early English Oak. Eight-inch, Convex, Porcelain Dial, Cast Sash, with Convex Beveled Glass. Height 16 inches. Depth 8½ inches. Price..... **$50 00**

We Handle Only the Best Grades and Most Reputable Makes of Clocks.

"THE HOUSE OF QUALITY"

ONLY DIAMOND CHAINS USED ON THESE TRUCKS

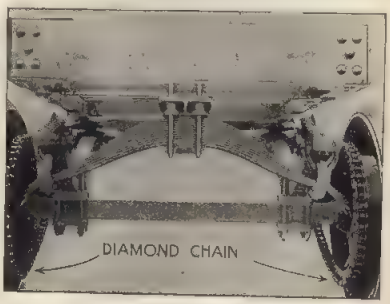
The Dayton Auto Truck Co., makers of the 3-ton truck, the chain drive of which is here shown, have used Diamond Chains exclusively on all their 2, 3, and 5-ton models.

The fact that such a prominent manufacturer has used Diamond Chains throughout a long business life and is now using more than ever, should be sufficient evidence that Diamond Chains are thoroughly good.

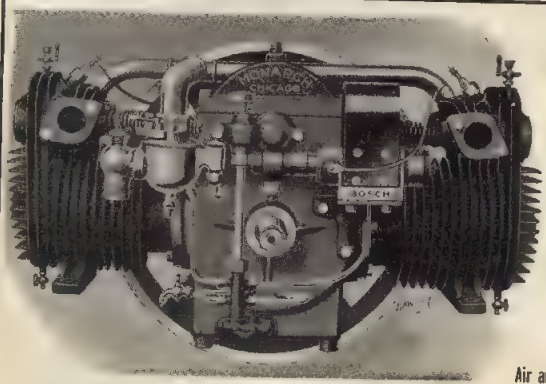
We could cite numerous similar old-experienced automobile builders who have consistently insisted upon Diamond Chain equipment because of the added satisfaction to the user and the absence of trouble for the truck builder

Our special chain steels and methods for uniform treatment, and the accuracy of our specially designed machines for the finishing of every part are in themselves a guarantee of highest quality for our product.

Write for book on chain power transmission or ask your jobber about Diamond quality.



DIAMOND CHAIN & MFG. CO.
260 W. Georgia Street, Indianapolis, Ind.
CAPACITY 3,000,000 FEET PER YEAR (124)



A Commercial Motor in Every Sense

(5 x 4¾ Special)

Air and Water-Cooled

The most durable and easily accessible engine of its type made.
An ideal power plant for a one ton capacity car.
Any part or parts of this motor may be removed without disturbing the engine proper.

Full details on request

MONARCH MOTOR MFG. CO. - - 3145 N. Halsted St., Chicago

Sterling Silver Table Ware

Morning Glory Pattern. French Gray Finish. Illustrations Are Exact Size.

Morning Glory Pattern

French Gray Finish

		Prices Per dozen.
6292	Tea Spoons, Light	$22 75
6293	Tea Spoons, Medium	27 00
6294	Tea Spoons, Heavy	33 00
6295	Dessert Spoons, Heavy.	48 00
6296	Table Spoons, Heavy....	59 00
6297	Soup Spoons. .	43 50
*6298	Dessert Forks, Heavy	48 00
6299	Table Forks, Heavy. .	59 00
6300	Dessert Knives.	50 75
6301	Medium Knives	59 50
6302	Bouillon Spoons .	33 25
6303	Butter Spreaders	36 75
6304	Coffee Spoons, Plain Bowl	17 50
6305	Coffee Spoons, Gilt Bowl. .	20 25
6306	Orange Spoons.	42 00
6307	Oyster Forks .	28 00
6308	Salad Forks, Individual. .	53 50

Single Pieces

Forks

		Prices, Each
6309	Cold Meat Fork, Plain Tines.	$ 7 60
6310	Cold Meat Fork, Gilt Tines.	8 25
6311	Salad Fork, Serving, Plain Tines.	12 25

Ladles

		Each.
6312	Cream Ladle, Plain Bowl.....	$5 25
6313	Gravy Ladle, Plain Bowl	8 75

Spoons

		Prices, Each.
6314	Berry Spoon, Plain Bowl ...	$12 25
6315	Berry Spoon, Gilt Bowl.	13 25
6316	Olive Spoon, Plain Bowl.	3 85
6317	Salad Spoon, Serving, Plain Bowl.	12 25
*6318	Sugar Spoon, Plain Bowl.....	3 85
6319	Sugar Spoon, Gilt Bowl.	4 20

Miscellaneous

		Each.
*6320	Butter Knife.	$4 75
6321	Pie Server...	8 00
6322	Sugar Tongs	5 25

*Article Illustrated.

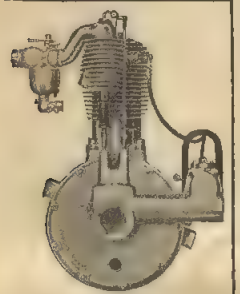
We will gladly quote prices on any articles in this pattern not listed.

Let us quote you on Mahogany or Oak Chests of Sterling Silver Table Ware in this pattern in combinations of 30 to 105 pieces or more.

A REVOLUTION IN MOTOR CYCLE MOTOR DESIGN

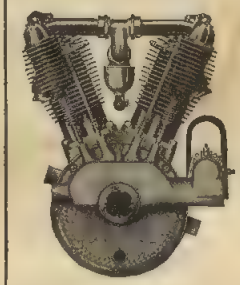
In bringing out our DE LUXE line of motor cycle motors, we have introduced a large number of improvements, and offer these motors as the most advanced now before the trade.

NOTEWORTHY IMPROVEMENTS.



One piece crank shaft.
One part crank case with cover.
Improved Cam and Magneto Drive.
Oil Tight Motor.
Large Valves.
Simplified design throughout.
Reduced number of parts.
Quiet running motor
Large Ball Bearings mounted in steel lined pockets.
Equipped with Bosch Magneto.

These improvements in design, together with the high grade materials used in construction, the modern methods of manufacturing applied, and the remarkable performance of these motors in road tests, mark a revolution in motor cycle motor building.



FOUR SIZES.

Four H. P. Single Cylinder Motor.
Five H. P. Single Cylinder Motor.
Seven H. P. Twin Cylinder Motor.
Nine H. P. Twin Cylinder Special.

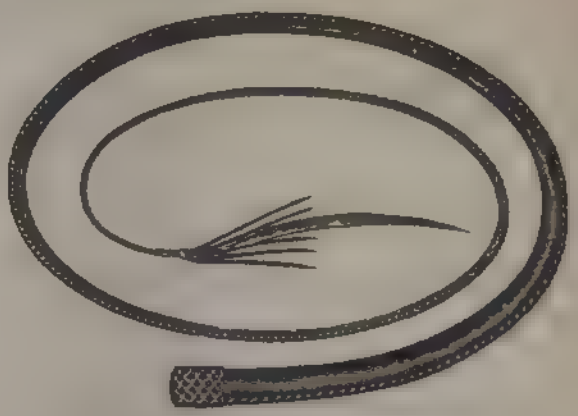
PLAIN OR TWO SPEED MODELS
IMMEDIATE DELIVERY
CONTRACTS SOLICITED

PATENTS PENDING

THE F. W. SPACKE MACHINE CO.

INDIANAPOLIS, IND., U. S. A.

MULE SKINNERS



Double Latigo Cover; Shot Loaded; Buck Stitched

	Per Dozen
No 5030L—7 ft. Long; 8 Plait Buckskin Point, 3¼ ft. Long; Large Head Button; Color ranges from Russet to Chocolate	$32 00
No 5030C 6½ ft Long, 8 Plait Buckskin Point 3¼ ft Long; Large Head Button, Pearl Chrome Leather Cover	32 00
Weight 24 Lbs. per Dozen	

	Per Dozen
No 5022—6½ ft Long; New Colorado Style 6 Plait Braided Buck Point, 1½ ft Long; Copper Wire Wound Butt	$23 00
Weight 18 Lbs. per Dozen	

CATTLE WHIPS

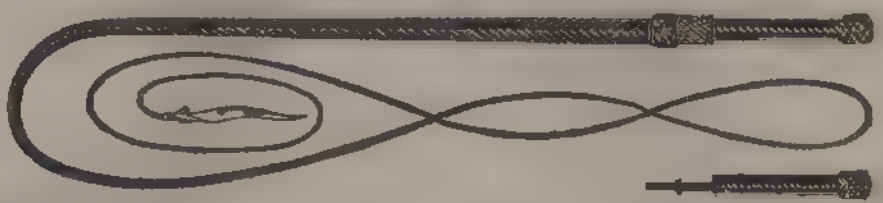
AUSTRALIAN, CALIFORNIA STYLE

8 Plait Latigo Leather, Shot Loaded Double Loop Fastener, Solid Steel Revolving Handle, Leather Covered Buck Point; Three Leather Buttons

	Per Dozen
No 810 10 ft Long Weight 22½ Lbs per Dozen	$38 00
No. 812—12 ft. Long; Weight 25 Lbs. per Dozen	$44 00

All Above, Open Stock

DROVERS' WHIPS



Jacksonville, California Style; a Favorite in the North Central and Western States, and Western Canada

NEW ROTARY, SHOT LOADED

With 9 in. Double White Lacing at the Handle; Otherwise same as above

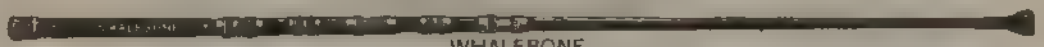
	Per Dozen
No 0740 10 ft Long; Weight 23 Lbs per Dozen	$34 00
No. 0742 12 ft Long, Weight 25½ Lbs per Dozen	$38 00

SWIVEL, CALIFORNIA STYLE

	Per Dozen
No. 5084—10 ft. Long; 8 Plait Russet Leather, Oiled; White Horsehide Point; Swivel Wood Handle	$26 50
Weight 15 Lbs. per Dozen	

All Above, Open Stock

WHIP STOCKS



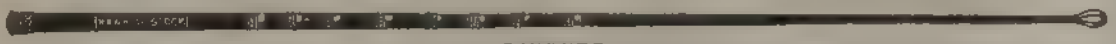
WHALEBONE

Whalebone Half Length, Black, Twelve ¾ in. Nickel Ferrules; 1¾ in. Nickel Head; Buckskin Keeper

No 10—4 ft. Long, Weight 8 Lbs. per Dozen .. Per Dozen $19 00

No 12—4½ ft. Long; Weight 8¼ Lbs. per Dozen . .... Per Dozen $23 70

Quarter Dozen in a Bundle



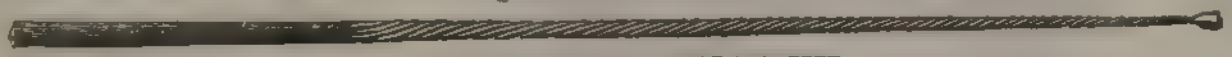
RAWHIDE

Solid Rawhide, Plaited Through, Black, Five 1½ in. Nickel Ferrules, 1½ in. Nickel Head, Buckskin Keeper

No 707—4 ft. Long, Weight 7¼ Lbs per Dozen .. Per Dozen $13 10

No. 707X—4½ ft. Long; Weight 8 Lbs. per Dozen..... Per Dozen $15 00

Quarter Dozen in a Bundle



TWISTED HICKORY; LENGTH 3¾ FEET

With Rawhide Keeper

No. 14K—6 Strand. . . Per Dozen $4 70

Without Keeper

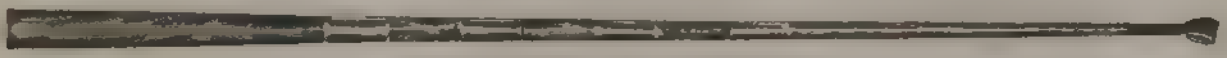
No 14—6 Strand . ..... Per Dozen $4 00

Quarter Dozen in a Package Weight 6 Lbs. per Dozen

MALACCA

No 834—4½ ft. Long, Malacca, Rich Dark Color 1¼ in. Nickel Head, 1½ in. Nickel Ferrule Buckskin Keeper .. Per Dozen $6 00

Open Stock; Weight 6 Lbs. per Dozen



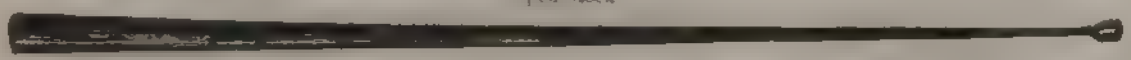
EXTRA QUALITY HICKORY HAND SHAVED

Four 1½ in. Nickel Ferrules; Buckskin Keeper

No X966—4½ ft. Long, Weight 6 Lbs per Dozen .... Per Dozen $7 50

No. 966—5 ft. Long; Weight 6½ Lbs. per Dozen..... Per Dozen $8 20

Open Stock



WHITE HICKORY; HAND SHAVED

No. X965—With Rawhide Keeper

Length, Feet	4	4½	5
Weight per Dozen, Lbs.	4	4¼	5
Per Dozen	$4.00	4 70	5.30

EXTRA QUALITY, WHITE HICKORY, HAND SHAVED

No. 965—With Buckskin Keeper

Length, Feet	4½	5
Weight per Dozen, Lbs.	4½	5
Per Dozen	$6.00	6.70

Turned, with Rawhide Keeper

No. 990—RED HICKORY

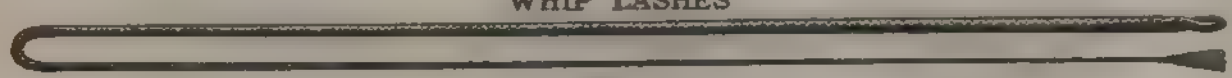
Length, Feet	3½	4	4½
Weight per Dozen, Lbs.	3½	4	4½
Per Dozen	$1.60	1.80	2.20

No. 991—WHITE HICKORY

Length, Feet	3½	4	4½	5
Weight per Dozen, Lbs.	3½	4	4½	5
Per Dozen	$1.90	2.20	2.40	2.70

Open Stock

WHIP LASHES



COMMON

With Buckskin Keeper

Length, Feet	5	6	7	8
Weight per Dozen, Lbs.	1	1¼	1½	2
No 972—Plain Round Leather	Per Dozen $1 10			
No 988—4 Plait Braided White Horsehide	Per Dozen 2 40	3.30	3.40	6.40
No. 1009—4 Plait Braided Buckskin	Per Dozen 6 40	7 70	9 00	....
No. 1010—6 Plait Braided Buckskin	Per Dozen	9 00	....	....

Open Stock

CALIFORNIA STYLE, HIGH GRADE, WESTERN STAGE LASHES

BRAIDED BUCKSKIN

Price per Dozen

Length, Feet	8	10	12	14	16
Weight Dozen, Lbs.		2½	2¾	3	3½
No 1035—4 Plait	$12 80	16 00	19 20	22 40	25 60
No. 1036—6 Plait.		20 00	24 50	28 00	32 00
No. 1037—8 Plait.		25 00	30 00	35 00	42 70
No. 1038—12 Plait.		46 70	56.00	65.40	74.70
No. 1039—16 Plait.		60 00	60.00	70.00	80.00

BRAIDED HORSEHIDE, WITH BUCKSKIN TIP

Length Feet	10	12
Weight Dozen, Lbs.	2½	3
No. 1022—6 Plait.	Per Dozen $12 00	14.40

Open Stock

WHIP SNAPS OR CRACKERS

Length, 7 inches

No 7S—Silk Per Dozen $0 60

No. 7H—Half Silk..... Per Dozen $0 50

No. 7C—Cotton..... Per Dozen $0 20

Open Stock

Something New In Dealer Helps

We propose to push your washer business by a new, novel and effective means—effective because of that very "newness" and novelty.

If you'll agree to stock five "Happy Day" Washing Machines of either Hand, Electric, Power or Water Motor, we will furnish One Hundred and Seventy-five Dollars worth (retail price) of sheet music—the "Happy Day" song—bearing your name, address and advertisement on the reverse side

Distribute this music—and by the way, it's GOOD music—among your customers, free of all charge—put your "Happy Day" Washers where folks can see them—and there'll be "happy days for sure, what with the singin', sellin' and the ease o' washin,'" as Mr. O. H DAY, our foreman, would say

But this doesn't end our proposition—we don't expect you to overload the mails with orders for our washer on mere mention of the music and its name

It's the machine itself that counts its mechanical features, its power saving, and its fair price. But after all is said and done, the way a washer washes is the true test of that washer's worth. You can SEE that the "Happy Day" washes well, by the smile on the lady's face. Turn "Blue Monday" into a Happy Day.

Let us submit our whole plan complete—together with full specifications on our Electric, Water Motor, Power and Hand Operated Machines

Write.

The National Sewing Machine Co.

Belvidere, Illinois

Certain-teed
(Quality Certified—Durability Guaranteed)
ROOFING

It's easy to sell—because

This **Certain-teed** label of Quality creates confidence in the minds of consumers—the demand is so sure you should determine right now to keep **Certain-teed** Roofing in stock to meet this demand.

It don't cost you one cent extra.

Certain-teed Roofing
Quality Certified—Durability Guaranteed
A CERTIFICATE OF QUALITY
The General Says
"The Roofing on this roll is manufactured in my big mills and is made of the very highest quality raw materials.
On account of my facilities and the enormous amount I make, I can produce the highest grade, most durable Roofing, so that the dealer can sell it at a low price.
This roll of Certain-teed Roofing is a splendid product at a reasonable price
FULLY GUARANTEED
1 Ply 5 Years 2 Ply 10 Years 3 Ply 15 Years
"The Dealer selling this Roofing is authorized to furnish the manufacturers written guarantee for periods mentioned above."

GENERAL ROOFING MFG. COMPANY

York, Pa. Minneapolis **Marseilles, Ill.** San Francisco, **E. St. Louis, Ill.**

COLDWELL Hand, Horse and Motor LAWN MOWERS

are made in

The largest and best equipped Lawn Mower Factory in the World

1912 Catalogue now ready

COLDWELL LAWN MOWER CO.

CHICAGO **Newburgh, N. Y.** PHILADELPHIA

Sterling Silver Table Ware

Newbury Pattern, Bright Finish. Illustrations are Exact Size.

Newbury Pattern

Bright Finish

		Prices, Per dozen.
6168	Tea Spoons, Light	$20 00
6169	Tea Spoons, Medium	24 00
6170	Tea Spoons, Heavy	30 00
6171	Dessert Spoons, Heavy	54 00
6172	Table Spoons, Medium	56 00
6173	Soup Spoons	45 00
6174	Dessert Forks, Heavy	54 00
*6175	Table Forks, Medium	64 00
6176	Dessert Knives	52 50
*6177	Medium Knives	63 00
*6178	Bouillon Spoons	31 50
6179	Butter Spreaders	42 00
6180	Coffee Spoons, Plain Bowl	15 75
6181	Coffee Spoons, Gilt Bowl	19 25
6182	Orange Spoons	47 25
*6183	Oyster Forks	35 00
6184	Salad Forks, Individual	52 50

Single Pieces

Forks

		Prices, Each.
6185	Cold Meat Fork, Plain Tines	$14 00
6186	Cold Meat Fork, Gilt Tines	15 75
6187	Pickle Fork, Plain Tines	5 25
6188	Salad Fork, Serving, Plain Tines	19 25

Ladles

		Each
6189	Cream Ladle, Plain Bowl	$ 4 75
6190	Gravy Ladle, Plain Bowl	10 50

Spoons

		Prices, Each.
6191	Berry Spoon, Plain Bowl	$14 00
6192	Berry Spoon, Gilt Bowl	15 75
6193	Olive Spoon, Plain Bowl	4 00
6194	Salad Spoon, Serving, Plain Bowl	17 50
6195	Sugar Spoon, Plain Bowl	3 50
6196	Sugar Spoon, Gilt Bowl	4 00

Miscellaneous

		Each.
6197	Butter Knife	$ 5 25
6198	Pie Server	8 00
6199	Sugar Tongs	6 25

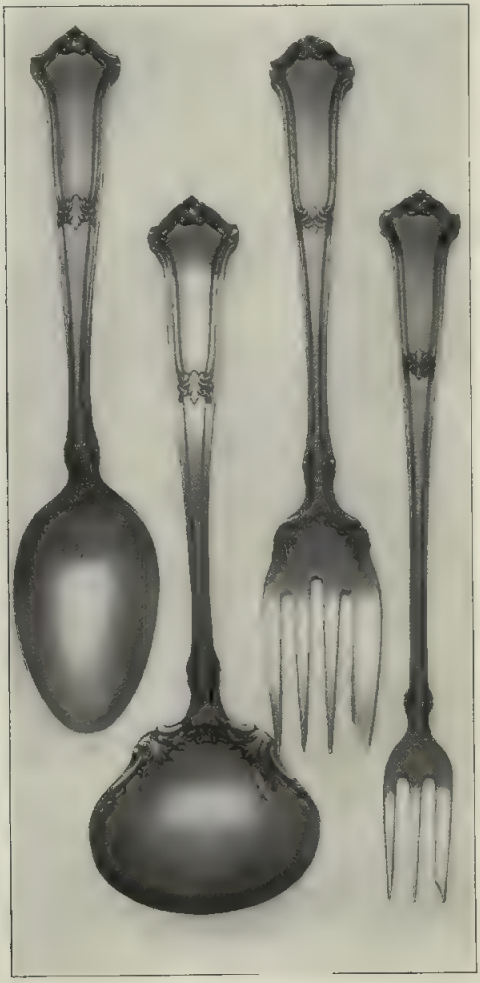
*Article Illustrated.

We will gladly quote prices on any articles in this pattern not listed.

Let us quote you on Mahogany or Oak chests of Sterling Silver Table Ware in this pattern in any combinations you desire.

Sterling Silver Table Ware

Saxon Pattern, French Gray Finish. Illustrations are Exact Size.



Saxon Pattern

French Gray Finish

		Prices, Per dozen.
6200	Tea Spoons, Light	$32 00
*6201	Tea Spoons, Medium	27 00
6202	Tea Spoons, Heavy	32 00
6203	Dessert Spoons, Medium	44 00
6204	Table Spoons, Medium	55 00
6205	Soup Spoons	49 50
6206	Dessert Forks, Medium	44 00
6207	Table Forks, Medium	55 00
6208	Dessert Knives	50 75
6209	Medium Knives	57 75
6210	Bouillon Spoons	37 75
6211	Butter Spreaders	30 00
6212	Coffee Spoons, Plain Bowl	15 75
6213	Coffee Spoons, Gilt Bowl	19 25
6214	Orange Spoons	42 00
*6215	Oyster Forks	28 00
*6216	Salad Forks, Individual	47 25

Single Pieces

Forks

		Prices, Each.
6217	Cold Meat Fork, Plain Tines	$ 8 40
6218	Cold Meat Fork, Gilt Tines	9 30
6219	Salad Fork, Serving, Plain Tines	18 00

Ladles

		Each.
*6220	Cream Ladle, Plain Bowl	$ 5 00
6221	Gravy Ladle, Plain Bowl	10 25

Spoons

		Prices, Each.
6222	Berry Spoon, Plain Bowl	$14 00
6223	Berry Spoon, Gilt Bowl	15 40
6224	Olive Spoon, Plain Bowl	3 15
6225	Salad Spoon, Serving, Plain Bowl	13 00
6226	Sugar Spoon, Plain Bowl	3 85
6227	Sugar Spoon, Gilt Bowl	4 40

Miscellaneous

		Each
6228	Butter Knife	$ 1 75
6229	Pie Server	6 65

*Article Illustrated.

We will gladly quote prices on any articles in this pattern not listed.

Let us quote you on Mahogany or Oak chests of Sterling Silver Table Ware in this pattern in any combination you desire.

If You Are Uncertain About Any of Our Goods, Write Us; We Will Answer Promptly.

"THE HOUSE OF QUALITY"

Timers, Chronographs and Novelty Watches

Nickel Open Face Horse Timer.
Start, Stop and Fly-Back, controlled from the crown. Stem wind. Shows seconds and fifths. Has minute register working to the right. Nickel movement.

1047 Lever escapement. Glass under cap. White enamel dial. Price.....**$16 00**

1048 Same with Cylinder Escapement. Price.....**12 00**

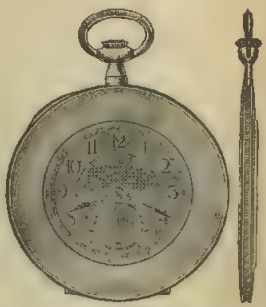
1049
SPLIT
Nickel Open Face Split Timer.
Has Start, Stop and Fly-Back operated from crown, and split hand from the side plug. Stem wind. Shows seconds and fifths. Has minute register working to the right. Nickel movement. Lever escapement. Glass cap and white enamel dial.
Price.....**$40 00**

New England Chronograph, 7 Jewels, Nickel Lever Movement. Has Start, Stop and Fly Back Attachment controlled from the Crown. Stem Wind. Beats Fifths of Seconds.

1050 In Solid Nickel Case. Price.**$16 65**
1051 In 10 Year Case. **22 65**
1052 In 20 Year Case. **26 00**

1053
Foot Ball Timer.
Has start, stop and Fly back operated by side plug and crown. Hand starts from place it stops so that "time out" can be taken without resetting watch or figuring time lost. Very essential for foot-ball games. Has best nickel lever movement. Glass cap and white enameled dial.
Price.....**$18 00**

1054
Niello Locust. Something entirely new. Beautiful designs artistically etched on a base of German silver and we guarantee the niel not to wear off, thus making a very attractive watch that will always keep the same appearance. Movement contains 7 jewels, extra well finished throughout and is thoroughly non-magnetic, thus making a very practical timepiece. The dial is made of metal finished in gilt or silver and the hands are blue steel.
Price.....**$12 00**



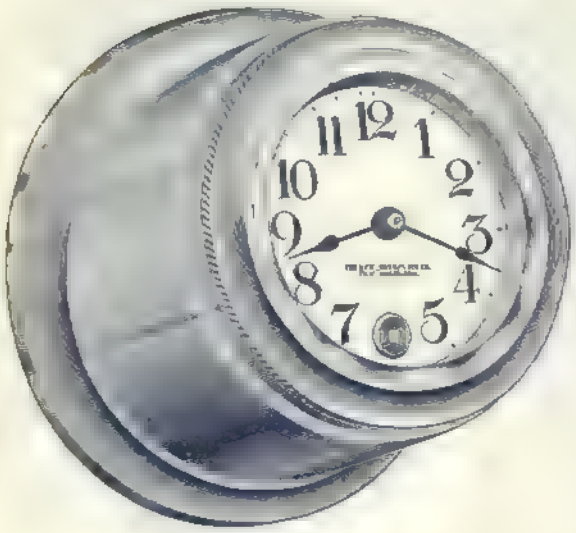
1055
Gun metal 18018 Ilinois, Open Face Watch. Very thin model, called "The Wafer Watch." Fitted with 7 Jewel Tavannes movement. Beautiful silt dial. An exceptionally handsome novelty watch. Absolutely guaranteed.
Price **$25 00**

Our 10, 20 or 25 Year Watch Case Guarantee Means 10, 20 or 25 Years, or a New Case Free.

"THE HOUSE OF QUALITY"

New Haven Clock Co.'s Fine Automobile Wood and Metal Lever Clocks

GUARANTEED ACCURATE TIMEKEEPERS. PRICES EACH.



JERICHO—(Automobile).

Heavy brass case with off-set, dust and water proof, height 4¾ inches, width 4¾ inches, 3 inch porcelain dial, eight-day time movement.

No. 6146 Brass. Each $9.95
No. 6147 Brass, Nickel finish. Each..... 9.95
No. 6148 " Gun metal " . " 9.95

Clock attaches to car by locking device, easily and quickly operated.

ENGINE LEVER.

Heavy brass case, dust and water proof, height 5 inches, width 5 inches, 3-inch porcelain dial, eight-day time movement.

No. 6149 Brass. Each $12.60
No. 6150 Nickel finish. Each 12 60

DUANE.

Heavy brass case, with off-set holding a complete watch; polished brass, nickel or gun metal finish, height 3½ inches, width 2¾ inches, dial 1⅝ inches, one-day time movement.

No. 6151 Brass. Each..... $3.90
No. 6152 " Nickel finish. Each..... 3.90
No. 6153 " Silver finish. " 3.90

GALLERY.

GALLERY—14-inch Dial.

Solid Oak or Walnut, 14-inch dial, diameter of case, 21½ inches.

No. 6154 Eight-day time. Each $24.15
No. 6155 Thirty-day time. " 27.35

GALLERY—18-inch Dial.

Solid Oak or Walnut, 18-inch dial, diameter of case, 25⅞ inches.

No. 6156 Eight-day time. Each..... $29 80
No. 6157 Thirty-day time. " 31.90

Fine Imported Cottage Barometers, Miniature, Cuckoo and Novelty Clocks

Prices Each

COTTAGE BAROMETER

Made of fancy carved wood, with thermometer. Height 9 inches, width 6 inches. Indicates the weather six to eight hours ahead. In good weather lady appears, in bad weather man appears.

No. 6137 Each $2.75

COTTAGE BAROMETER (Wetterhausle)

Made of wood, nicely painted, with gravel roof and thermometer. Height [illegible] inches, width [illegible] inches. Indicates the weather six to eight hours ahead. In good weather lady appears, in bad weather man appears.

No. 6138 Each $3.00

MINIATURE CUCKOO CLOCK

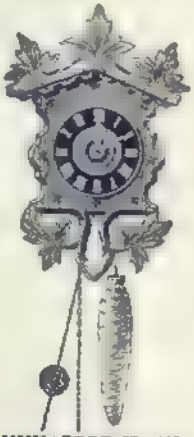
Height 13 inches, width 8½ inches, dial 3½ inches. Half-hour cuckoo call. Imitation walnut case, small size movement. Each clock packed with two weights in strong pasteboard box. A reliable clock for the money.

No. 6139 Each $1.35

MINIATURE CLOCK

Height 8 inches, width 5 inches. Solid walnut or oak, with patent celluloid dial.

No. 6140 Each $2.70



MINIATURE CLOCK

Height 7 inches, width 4½ inches. Wood front, old style movement. Walnut or oak colors.

No. 6141 Each $1.05

MANTEL CUCKOO CLOCK

Height 16 inches, width 12 inches. Solid oak case. One-day spring movement. Half-hour call.

No. 6142 Each $13.35

NURSERY OR KITCHEN CLOCK

Porcelain enameled front, 8½ inches. Dutch designs in blue Delft. One-day lever time movement. Dust and damp proof. Natural landscape colors.

No. 6143 Each $4.70

GLOBE CLOCK

Height 14 [illegible] inches in diameter. [illegible] to be set by [illegible] Standard [illegible] Each [illegible] $10.00

NURSERY [illegible]

Porcelain enameled dial, 9 inches, [illegible] of gray frame, 12½ inches. Dutch designs [illegible] lever time movement. [illegible] Each $6.00

New Haven Clock Co.'s Fine Mission Clocks

Guaranteed Accurate Timekeepers

Prices Each.

SAN PEDRO

Solid Oak, Flemish finish, height 19 inches, width 12¾ inches, 6 inch wood dial, cast numerals and fancy brass hands, eight day half-hour strike, cathedral gong.

No. 5989 Each $7.75

LOS ALAMOS

Solid Oak, Flemish finish, height 14½ inches, width 11¾ inches, 6 inch wood dial, cast numerals and fancy brass hands, eight-day half-hour strike, cathedral gong.

No. 5990 Each $7.75

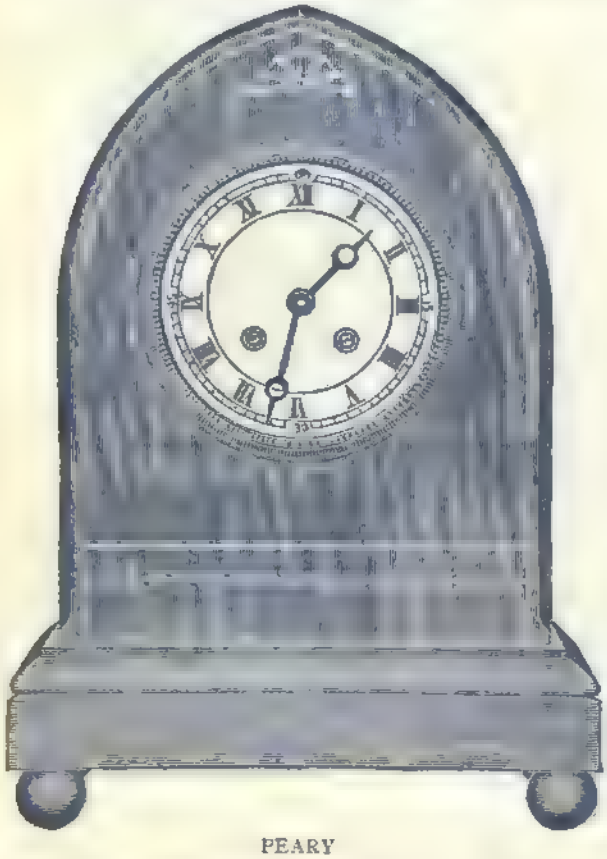
SAN LUIS

Solid Oak, Flemish finish, height 20 inches, width 13 inches, 6 inch wood dial, white numerals on background of artistic color, fancy brass hands eight day half-hour strike, cathedral gong.

No. 5991 Each $8.70

New Haven Clock Co.'s Fine Cabinet (English) Clocks

Guaranteed Accurate Timekeepers



PEARY

Highly polished, "Marquetry Inlaid", height 13 inches, width 9¼ inches, 5 inch porcelain dial, French cast sash, beveled bowed glass, eight-day half-hour strike, cathedral gong.

No. 5992. Antique Oak. Each $26.15
No. 5993. Mahogany. " 26.15

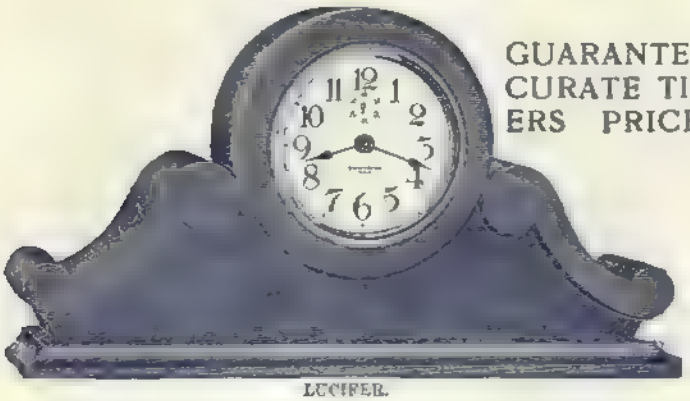
PACOLET

Mahogany "Marquetry Inlaid", highly polished, height 12½ inches, width 10 inches, 7 inch porcelain dial, French cast sash, beveled bowed glass, eight-day half-hour strike, cathedral gong.

No. 5994 Each $32.90

NEW HAVEN CLOCK CO.'S FINE CABINET CLOCKS

GUARANTEED ACCURATE TIMEKEEPERS PRICES EACH.



LUCIFER.

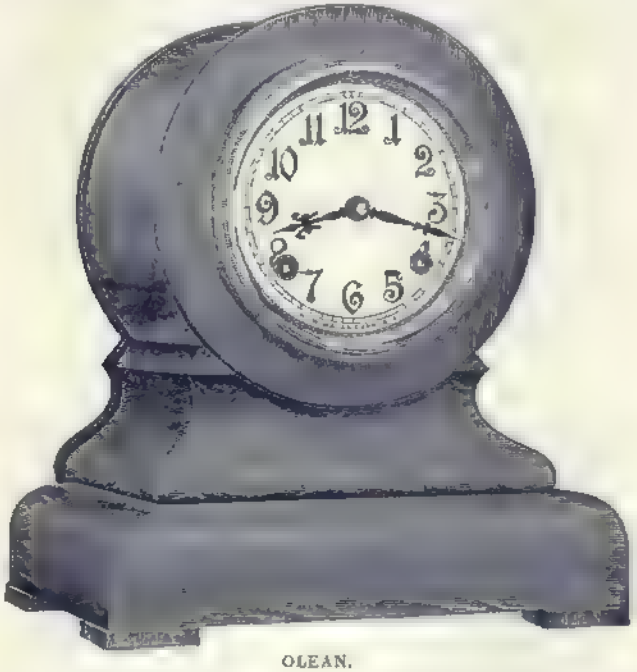
Solid mahogany case. Height, 9¼ inches; width, 10 inches. 3-inch porcelain dial. Eight-day time movement.

No. 5983 Each.....$0.70

AURORA.

Solid mahogany, height 12¼ inches, width 8¼ inches, 6 inch porcelain dia., French cast sash, beveled glass, eight-day half-hour strike, cathedral gong

No. 5984 Each.....$13.55



OLEAN.

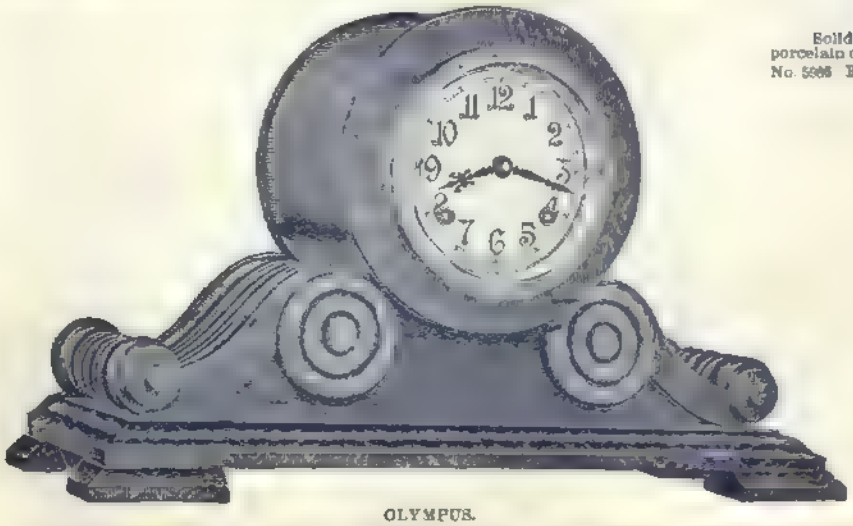
Solid mahogany highly polished case. Height, 11¼ inches; width, 10¼ inches. 6-inch porcelain dial. French cast sash, beveled glass. Eight-day, half-hour strike, cathedral gong

No. 5985 Each.....$21.35

LOMBARD.

Solid mahogany case. Height, 7⅝ inches; width, 6 inches. 3-inch porcelain dial. Eight-day time movement.

No. 5986 Each.....$3.70



OLYMPUS.

Solid mahogany highly polished case. Height, 11 inches, width 18¼ inches. 6-inch porcelain dia., French cast sash, beveled glass. Eight-day, half-hour strike, cathedral gong.

No. 5987 Each.....$27.10

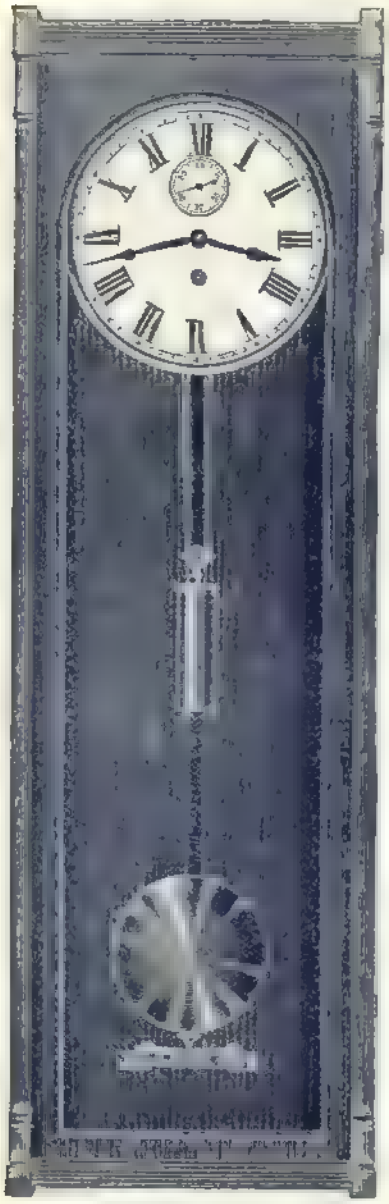
LORNE.

Solid mahogany case. Height, 11¼ inches; width, 10 inches. 6-inch dial. Eight-day, half-hour strike, cathedral gong.

No. 5988 Each.....$11.70

SETH THOMAS CLOCK CO.'S FINE WEIGHT REGULATORS

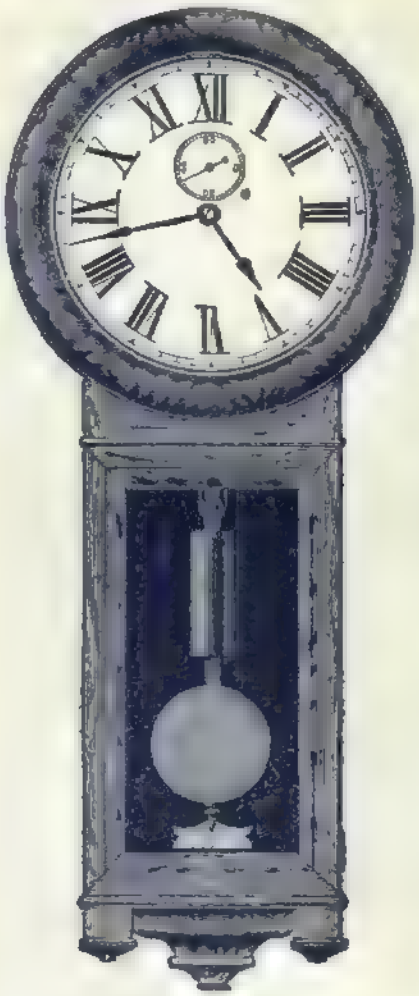
GUARANTEED ACCURATE TIMEKEEPERS. PRICES EACH



REGULATOR No. 11

Mahogany and golden oak. Eight-day, weight, time, beats seconds, large steel pinion movement with polished plates, Graham dead-beat escapement, and maintaining power. Wood rod, brass-covered zinc ball, 12-inch dial. Height, 56 inches.

No. 5795 Each $100.00



REGULATOR No. 2

A standard small regulator for railroads, schools, fire departments, offices, etc. Cherry, mahogany finish, old oak and walnut veneer, polished. Eight-day, weight, time; movement has strong well-finished plates, and is secured to an iron bracket, pendulum is suspended from same, Graham dead-beat escapement, wood rod, brass covered zinc ball, eighty beats to the minute. Has maintaining power. 12-inch dial. Height, 34 inches.

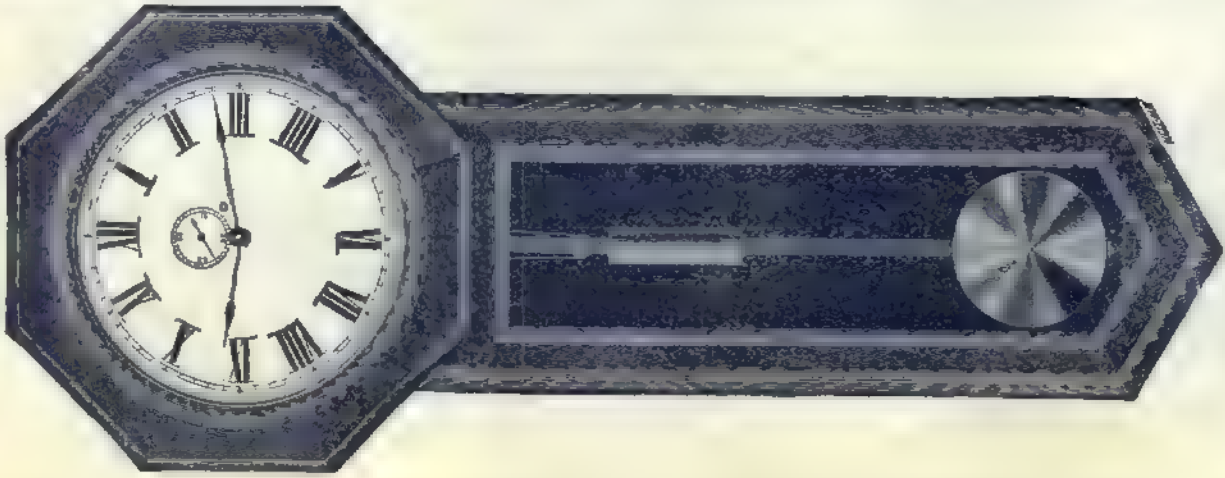
No. 5796 Each $32.70

30-DAY OFFICE

Double springs, time only, fine hand carved cabinet, old oak case. 12-inch dial. Height, 42 inches. An accurate time-piece, requiring winding but once a month.

No. 5797 Each $28 70

BEST CLOCKS ON THE MARKET AT EXTREMELY LOW PRICES
ALL ORDERS FILLED SAME DAY RECEIVED
WE AIM TO PLEASE OUR CUSTOMERS AT ALL TIMES



REGULATOR No. 18

Mahogany and oil oak veneer, polished. Eight-day, weight, time, beats seconds, movement has Graham pallets, lantern pinions and maintaining power, wood rod, brass covered zinc ball, brass weight 14 inch dial Height, 51 inches $53 35

No. 5798 Each

NEW HAVEN CLOCK CO.'S FINE MISSION AND HALL CLOCKS

GUARANTEED ACCURATE TIMEKEEPERS. PRICES EACH.

DUTCH No. 20

Solid oak, flemish finish. Eight-day, weight, half-hour strike, cathedral gong movement. 12-inch wood dial, cast hands and numerals. Height, 78 inches; width, 18½ inches.

No. 5789 Each.....$58.00

BROOKSDALE

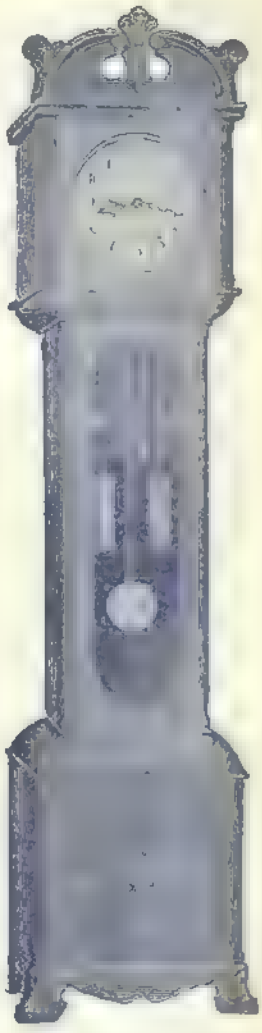
Antique oak or mahogany, highly polished. Eight-day, weight; half-hour strike, cathedral gong movement. Silver etched 12-inch dial. Height, 72½ inches; width, 20½ inches.

No. 5790 Each.....$106.35

WILMINGTON

Antique oak or mahogany with gilt top ornaments, highly polished. Eight-day, weight, half-hour strike, cathedral gong movement. Etched silver 12-inch dial. Height, 91 inches; width, 21½ inches.

No. 5791 Each $100.70



ARLINGTON

Solid mahogany, highly polished. Eight-day, weight, half-hour strike, cathedral gong movement. Etched metal 12-inch dial. Height, 90½ inches; width, 21 inches.

No. 5792 Each..... $100.70

SHEFFIELD

SHEFFIELD

Solid mahogany, highly polished. Eight-day, weight, half-hour strike, cathedral gong movement. Etched metal 12-inch dial. Height, 90½ inches; width 21½ inches.

No. 5793 Each $100.70

SHERBROOKE

Antique oak or mahogany with gilt top ornaments, highly polished. Eight-day, weight, half-hour strike, cathedral gong movement. Height, 95 inches; width, 22 inches. Etched 12-inch silver dial.

No 5794 Each $212.70

NEW HAVEN CLOCK CO.'S FINE REGULATORS

GUARANTEED ACCURATE TIMEKEEPERS. PRICES EACH.

CLOCKS SECURELY PACKED SO AS TO INSURE SAFE DELIVERY.

THE "BANK" REGULATOR

Solid oak. Height, 33¼ inches; width, 18½ inches. Dial 12 inches.

No. 5831	Eight-day time . . . each,	$ 9.70
No. 5832	Eight-day strike, cathedral gong, each	11.70
No. 5833	Eight-day time, calendar... each	10.30
No. 5834	Eight-day strike, cathedral gong, calendar . .	12.30

SATURN

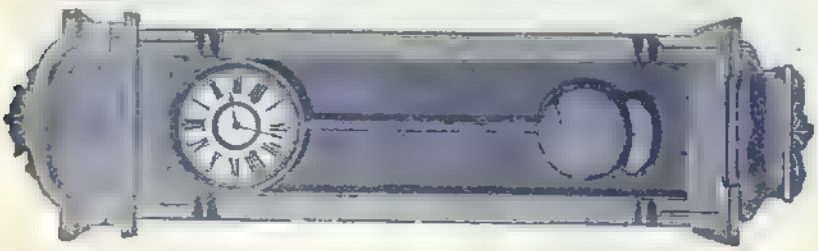
Solid oak antique finish. Height, 34¾ inches; width, 15¼ inches. Dial 12 inches. Fitted with 30-day time movement.

No. 5835 Each $21 35

ELFRIDA

Solid oak or mahogany. Height, 49 inches; width, 19 inches. Dial 10 inches.

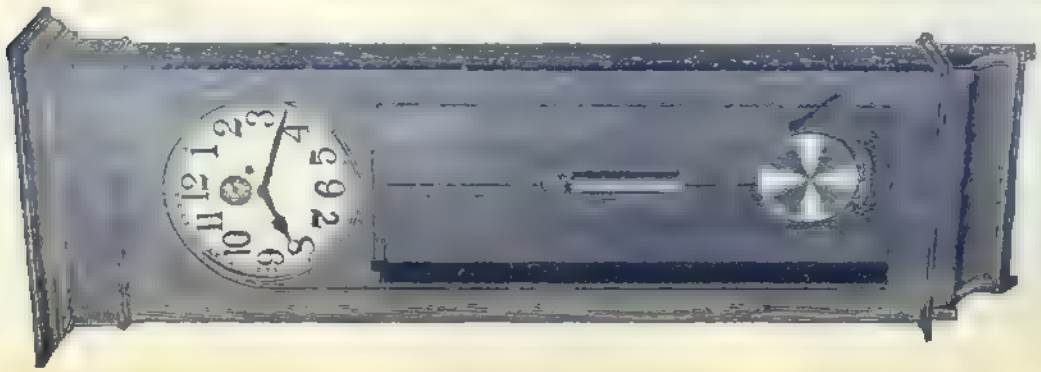
No. 5836	Eight-day time . . . . . each,	$24.35
No. 5837	Eight-daytime, calendar each,	24.95
No. 5838	Eight-day strike, cathedral gong.....each,	26.35
No. 5839	Eight day strike, cathedral gong calendar . . . . . each,	26 95
No 5840	Thirty-day time .. . .each,	27.30
No. 5841	Thirty-day time, calendar, each.....	31.00
No 5842	Eight-day weight, time, each	29 20



COLUMBIA

Solid oak or mahogany. Height, 48½ inches; width, 14½ inches. Dial 8 inches.

No. 5843	Eight-day time . . . each,	$20 00
No. 5844	Eight-day time, calendar. ....each,	20 60
No. 5845	Eight-day strike, cathedral gong .. each,	22.00
No. 5846	Eight-day strike, cathedral gong calendar..... . each,	22.60
No. 5847	Thirty day time . . . . each,	22 95



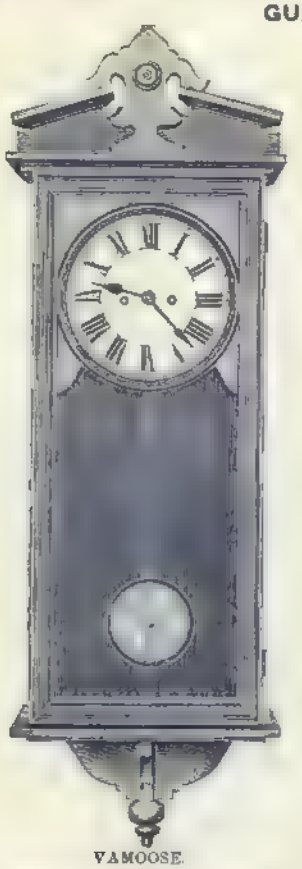
STANTON

Solid oak or mahogany, highly polished. Height, 64 inches; width, 21 inches. Dial 12 inches. Fitted with eight-day weight time, with retaining power movement.

No. 5848 Each..... $64.00

NEW HAVEN CLOCK CO'S FINE REGULATORS

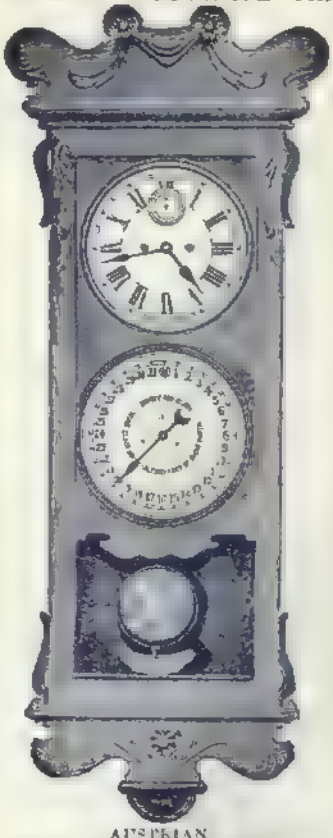
GUARANTEED ACCURATE TIMEKEEPERS. PRICES EACH.



VAMOOSE.

Solid Oak or Mahogany, height 45 inches, width 15¼ inches, dial 10 inches.

No. 5799	Eight-day time....each	$15.50
No. 5800	Eight-day time, Calendar "	16.10
No. 5801	Eight-day strike, Cathedral gong "	17.55
No. 5802	Eight-day strike, Cathedral gong Calendar "	18.70
No. 5803	Thirty-day time "	18.40



AUSTRIAN

(Showing 30 day Calendar Fitting)

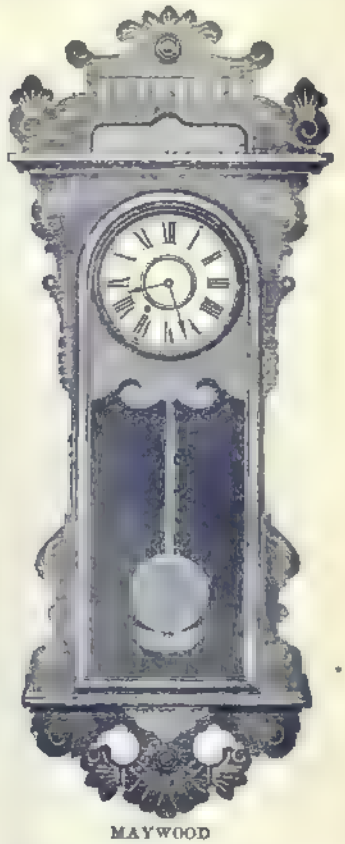
Solid Oak or Mahogany, height 48½ inches, width 19 inches, dial 10 inches.

No. 5804	Eight-day Time each	$23.35
No. 5805	Eight-day time, Calendar "	23.95
No. 5806	Eight-day strike, Cathedral gong "	25.35
No. 5807	Eight-day strike, Cathedral gong, Calendar "	25.95
No. 5808	Thirty-day time "	28.20
No. 5809	Thirty-day time, Calendar "	30.00
No. 5810	Eight-day Weight Time "	28.20

TROJAN.

Solid Oak or Mahogany height 44 inches width 13½ inches, dial 8 inches.

No. 5811	Eight-day time.each	$17.35
No. 5812	Eight-day time Calendar "	17.95
No. 5813	Eight-day strike, Cathedral Gong "	19.35
No. 5814	Eight-day Strike, Cathedral Gong, Calendar "	19.95
No. 5815	Thirty-day time "	20.30



MAYWOOD

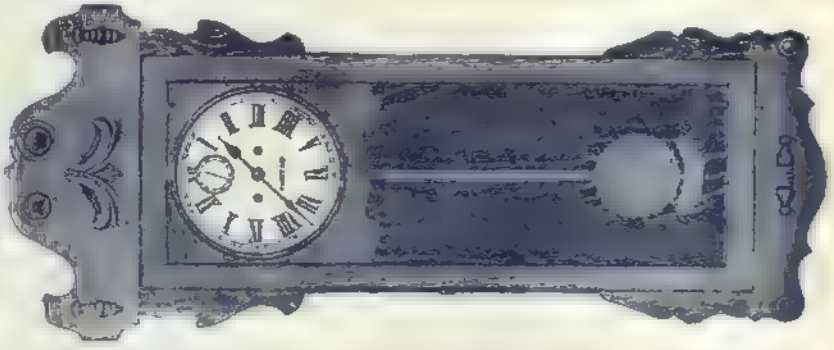
Solid Oak or Mahogany height 43½ inches, width 17 inches dia. 8 inches.

No. 5816	Eight-day time ....each	$14.55
No. 5817	Eight-day time, Calendar "	15.15
No. 5818	Eight-day strike Cathedral gong.... "	16.55
No. 5819	Eight-day strike, Cathedral gong, Calendar "	17.15
No. 5820	Thirty-day time..... "	17.50

RUTLAND

Solid Oak or Mahogany, height 48 inches, width 19½ inches, dial 10 inches.

No. 5821	Eight-day time .....each	$19.55
No. 5822	Eight-day time, Calendar .. "	19.95
No. 5823	Eight-day Strike, Cathedral Gong .... "	21.35
No. 5824	Eight-day Strike, Cathedral Gong, Calendar "	21.95
No. 5825	Thirty-day time..... "	22.30
No. 5826	Thirty-day time, Calendar ..... "	23.00



HARVARD

Solid Oak or Walnut, height 32¼ inches, width 17½ inches, dial 12 inches.

No. 5827	Eight-day time .....each	$13.60
No. 5828	Eight-day strike, Cathedral Gong "	15.60
No. 5829	Eight-day time, Calendar..... "	14.20
No. 5830	Eight-day strike, Cathedral Gong, Calendar ..... "	16.20

Seth Thomas Clock Co.'s Fine Office Regulators.

PRICES EACH.

12-INCH DROP OCTAGON.

Mahogany veneer or old oak, polished; height 23½ inches.

No. 5896 Eight-day, spring, time. Each.....$10.80
No. 5897 " " " strike. Each..... 12.95

10-INCH DROP OCTAGON.

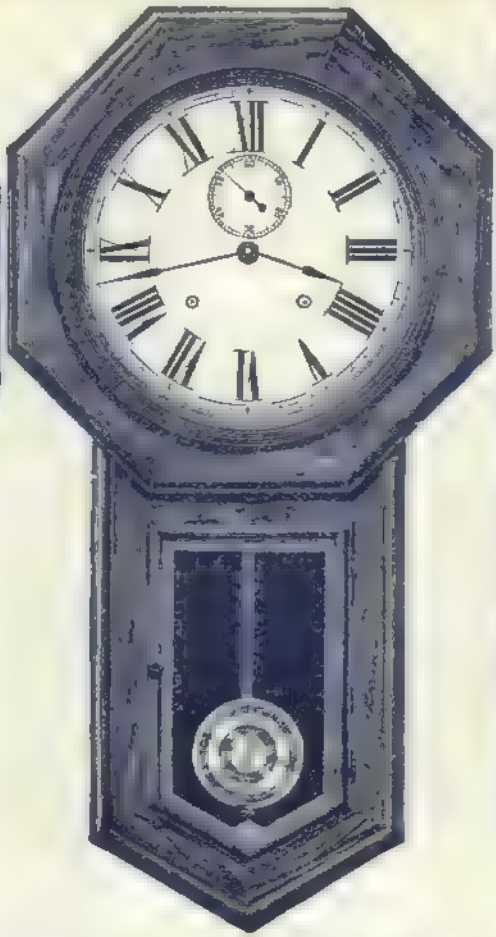
Mahogany veneer polished with gilt lines, or old oak without gilt lines; height 21½ inches.

No. 5898 Eight-day, spring, time. Each $10.35
No. 5899 " " " strike. Each 12.40

8-INCH DROP OCTAGON

Mahogany finish or fumed oak; height 17 inches.

No. 5900 Eight-day, spring, time. Each $7.60
No. 5901 " " " strike. Each 9.75



WORLD.

Mahogany or old oak veneer; height 32 inches, 12-inch dial. Has a large double spring movement with the celebrated "Graham" dead beat escapement.

No. 5902 Fifteen day, spring, time. Each $18.70
No. 5903 Eight-day spring, strike, cathedral bell. Each 21.35

No. 6 OFFICE.

Oak or mahogany, eight-day, spring, time only, height 30 inches, 12-inch dia.

No. 5904. Each $10.70

Surprisingly Accurate Regulators at Exceptionally Low Prices.

Guaranteed Accurate Timekeepers.

OFFICE No. 5.

Made in old oak only; height 28¼ inches, width 19¼ inches, 12-inch dial.

No. 5905 Eight-day, time. Each $14.80
No. 5906 Eight-day strike. Each 17.00

CHATHAM.

Mahogany or golden oak; 12-inch dial diameter 16 inches.

No. 5907 Eight-day, pendulum, time. Each... $ 9.75
No. 5908 Eight-day, pendulum, strike. Each... 11.20

RIO.

Mahogany veneer, polished; height 26¼ inches, 12-inch dial.

No. 5909 Eight-day, spring, strike. Each.....$14.40

NEW HAVEN CLOCK CO.'S FINE OFFICE CLOCKS AND REGULATORS

GUARANTEED ACCURATE TIMEKEEPERS. PRICES EACH.

10-INCH BRANFORD

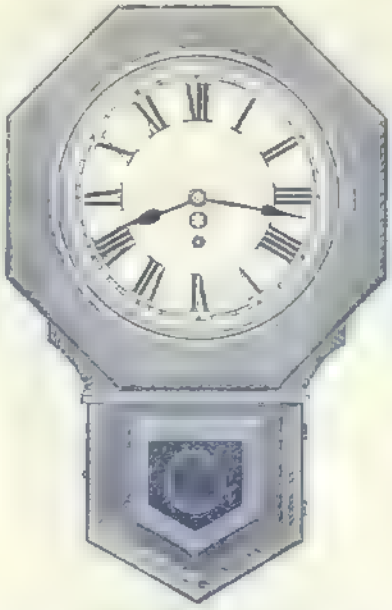
Solid oak. Height, 22¾ inches; width, 15 inches. Dial 10 inches.

No. 5010	Eight-day time	each, $ 8.75
No. 5011	Eight-day strike	each, 9.50
No. 5012	Eight-day time, calendar	each, 8.75
No. 5013	Eight-day strike, calendar	each, 10.10

12-INCH BRANFORD

Solid oak. Height, 27½ inches; width, 17½ inches. Dia. 12 inches.

No. 5014	Eight-day time	each, $ 8.55
No. 5015	Eight-day strike	each, [illegible]
No. 5016	Eight-day time, calendar	each, [illegible]
No. 5017	Eight-day strike, calendar	each, 10.50



8-INCH DROP OCTAGON

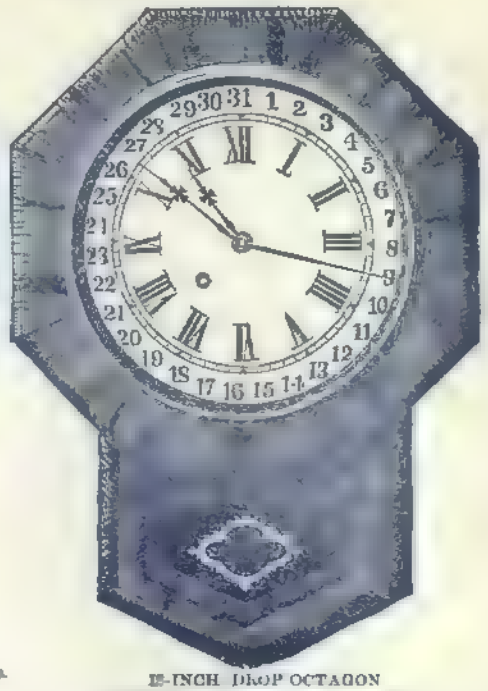
Solid oak. Height, 18¼ inches; width, 12½ inches. Dial 8 inches.

No. 5018	Eight-day time	each, $7.40
No. 5019	Eight-day strike	each, 8.75
No. 5020	Eight-day time, calendar	each, 8.40
No. 5021	Eight-day strike, calendar	each, [illegible]

10-INCH DROP OCTAGON

Solid oak. Height, 21⅝ inches; width, 15⅜ inches. Dial 10 inches.

No. 5022	Eight-day time	each, $7.90
No. 5023	Eight-day strike	each, 9.10
No. 5024	Eight-day time, calendar	each, 8.90
No. 5025	Eight-day strike, calendar	each, 9.80



12-INCH DROP OCTAGON

"Showing Eight-day calendar movement"

Rosewood or zebra veneer. Height, 24½ inches; width 16½ inches. Dial 12 inches.

No. 5026	Eight-day time	each, $ 9.35
No. [illegible]	Eight-day strike	each, 10.75
No. [illegible]	Eight-day time, calendar	each, 10.[illegible]
No. 5029	Eight-day strike, calendar	each, 11.30

12-INCH DROP OCTAGON

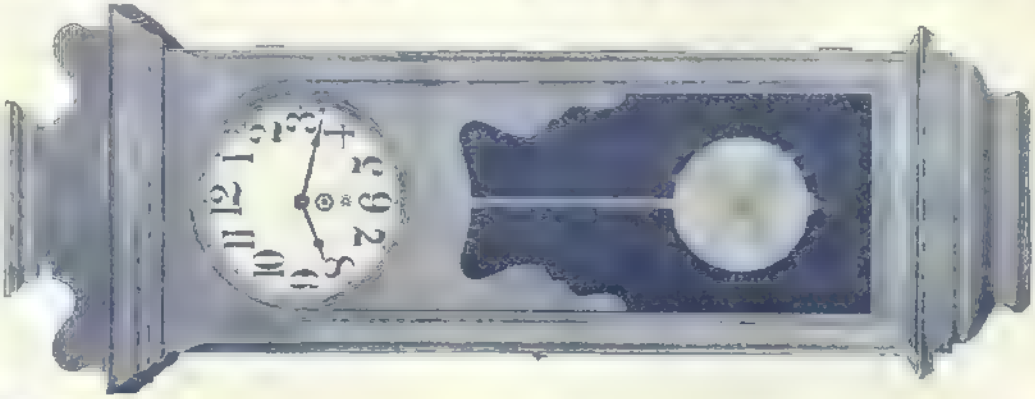
Solid oak. Height, 23½ inches; width, 16" inches. Dial 12 inches.

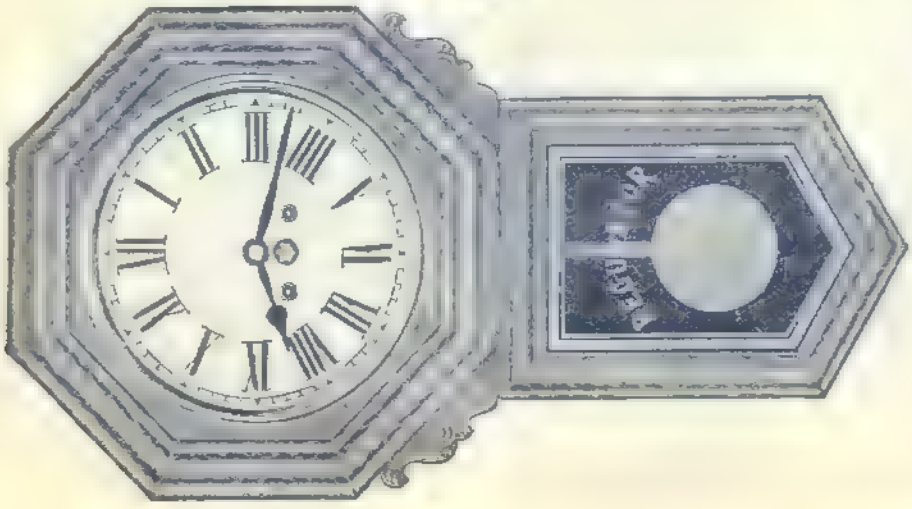
No. [illegible]	Eight-day time	each, $ 8.75
No. [illegible]	Eight-day strike	each, 10.[illegible]
No. [illegible]	Eight-day time, calendar	each, [illegible]
No. 5033	Eight-day strike, calendar	each, 10.70

SOLENT

Solid oak, antique finish. Height, 26¾ inches; width, 13¼ inches. Dial [illegible] inches.

No. 5034	Eight-day time	each, $15.[illegible]
No. 5035	Eight-day time, gong, calendar	each, 18.95
No. 5036	Eight-day time, gong	each, [illegible]
No. 5037	Eight-day time, gong, calendar	each, 20.95





ERIE

Solid oak, antique finish. Height, 33½ inches, width 18½ inches. Dial 12 inches.

No. 5038	Eight-day time	each, $ 9.70
No. 5039	Eight-day time, calendar	each, 10.30
No. 5040	Eight-day time, gong	each, 11.70
No. 5041	Eight-day time, gong, calendar	each, 12.30

NEW HAVEN CLOCK CO'S FINE REGULATORS & OFFICE CLOCKS

GUARANTEED ACCURATE TIMEKEEPERS. PRICES EACH.

TAMPA

(Showing 8 Day Calendar Fitting)

Solid Oak, height 37¾ inches, width 15¼ inches, dial 12 inches.

No. 5849	Eight-day time	each	$ 9.90
No. 5850	Eight-day strike, cathedral gong	"	11.90
No. 5851	Eight-day time, calendar	"	10.50
No. 5852	Eight-day strike, cathedral gong, calendar	"	12.50

GRECIAN.

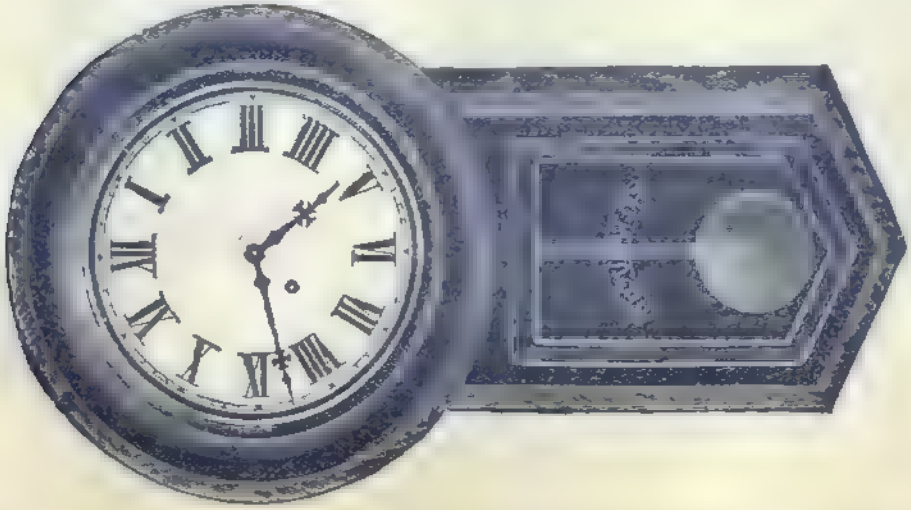
Solid Oak or Mahogany, height 51 inches, width 20 inches, dial 10 inches.

No. 5853	Eight-day time	each	$23.35
No. 5854	Eight-day time, calendar	each	23.65
No. 5855	Eight-day strike, cathedral gong	each	25.45
No. 5856	Eight-day strike, cathedral gong, calendar	each	25.95
No. 5857	Thirty-day time	"	24.30
No. 5858	Thirty-day time, calendar	each	30.00
No. 5859	Eight-day weight time		28.20

REFEREE.

Solid Oak, height 35½ inches, width 16 inches, dial 12 inches.

No. 5860	Eight-day time	each	$ 9.90
No. 5861	Eight-day strike, cathedral gong	"	11.90
No. 5862	Eight-day time, calendar	"	10.50
No. 5863	Eight-day strike, cathedral gong, calendar	"	12.50



REGULATOR

Solid Oak or Walnut, height 32¾ inches, width 17¾ inches, dial 12 inches.

No. 5864	Eight-day time	each	$12.55
No. 5865	Eight-day strike, cathedral gong	"	14.50
No. 5866	Eight-day time, calendar	"	13.15
No. 5867	Eight-day strike cathedral gong, calendar	"	15.15

Waterbury Clock Co.'s Fine Regulators.

GUARANTEED ACCURATE TIMEKEEPERS.

PRICES EACH.

STORE.

Oak; thirty-day time, with second hand; height 35¼ inches, width 17 inches, 12 inch dial

No. 5868 Each..... $12.00

ETON.

Oak or walnut; height 30¼ inches, width 15 inches, 8-inch dial

No. 5869 Eight-day, spring, time. Each..... $12.00

No. 5870 Eight-day, half-hour strike, gong. Each $14.00

SPRINGFIELD.

Oak; height 39¾ inches, width 16½ inches, 8-inch dial.

No. 5871 Eight-day, spring, time Each..... $12.00

No. 5872 Eight-day, spring, one-half hour strike, gong. Each 14.00

No. 5873 Eight-day, spring time, calendar Each 12.70

No. 5874 Eight-day, spring, one-half hour strike, gong, calendar. Each. 14.70

POSTAL.

Oak; height 48¼ inches, width 18¾ inches, 12-inch dial.

No. 5875 Eight-day, time. Each $21.70

No. 5876 Eight-day, half-hour strike, gong. Each 22.70

POSTORIA

Oak or walnut; height 48¾ inches, width 18¾ inches, 12-inch dial.

No. 5877 Eight-day, spring, time. Each $18.35

No. 5878 Eight-day spring, half hour strike gong. Each 20.35

No. 5879 Thirty-day spring, time, with second hand Each 21.00

POSTORIA

Mahogany

No. 5880 Eight-day, spring, time. Each..... $21.70

No. 5881 Eight-day spring, half-hour strike gong. Each 23.70

No. 5882 Thirty-day spring, time with second hand, Each 24.35

REGULATOR No. 67.

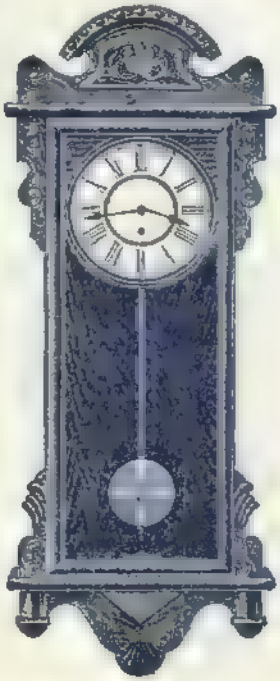
Oak or walnut. Eight-day, weight, time, dead-beat escapement, retaining power solid polished movement frames, height 60 inches, width 22 inches, 12-inch dial.

No. 5883 Each $32.00

REGULATOR No. 67

Mahogany

No. 5884 Each 36.00



NASSAU

Oak; height 46 inches, width 18½ inches, 10-inch dial.

No. 5885 Eight-day, spring, time Each $16.70

No. 5886 Eight-day spring one-half hour strike, gong. Each 18.70

No. 5887 Thirty-day, spring, time, with second hand Each 19.35

GALESBURG.

Oak or walnut; height 52 inches, width 14½ inches, 8-inch dial.

No. 5888 Eight-day spring, time Each $19.35

No. 5889 Eight-day, spring, one-half hour strike gong. Each 21.35

GALESBURG

Mahogany

No. 5890 Eight-day, spring, time. Each $22.70

No. 5891 Eight day spring, one-half hour strike, gong. Each 24.70

BRETON

Oak or mahogany, glass sides, height 44¾ inches, width 14½ inches, 8-inch dial

No. 5892 Oak eight-day, spring, time Each $19.35

No. 5893 Mahogany; eight-day spring, time Each 22.70

No. 5894 Oak eight-day, spring, half hour strike, gong Each 21.35

No. 5895 Mahogany, eight-day, spring half hour strike, gong Each 24.70

THE NEW INCA BRASS WARE

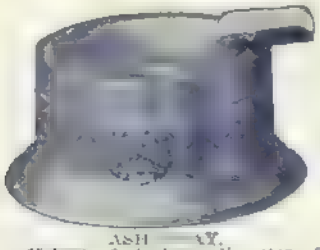
HIGHLY FINISHED, GREEN ENAMELED TRIMMINGS

The Ancient Peruvians, during the reign of INCAS were the only American nation who understood the fusing and alloying of metals.

Simple shapes, primitive mosaic borders, ornamented with grotesque human figures, faces and animals, were the most striking features of their metal work.

"INCA BRASS" follows closely the Arts of the early Peruvians, and the articles will be found to be not only beautiful but most interesting.

EXCEPTIONALLY DESIRABLE, USEFUL AND PRACTICAL ARTICLES
"THE NEW BRASS CRAFT"



ASH TRAY.
Height, 2 inches, diameter, 3 inches.
No. 9863 Each $2.50

INK STAND
Height, 3½ inches; width, 2¾ inches.
No. 9864 Each $1.75

CANDLESTICK
Height, 4¾ inches; diameter of base 4 inches.
No. 9855 Each $3.25

CANDLESTICK
Height, 8½ inches; diameter of base 4 inches.
No. 9856 Each $4.25

INK SET
Height, 3⅝ inches; width, 5¼ inches, length, 9 inches; 2 ink wells and 2 stamp compartments.
No. 9857 Per set $15.00

INK SET
Height 2½ inches; width, 3½ inches; length, 7½ inches.
No. 9853 Per set $4.75

All Orders Filled Same Day Received. No Delay.

CIGAR JAR.
Height 6¾ inches; diameter, 4¾ inches.
No. 9859 Each $4.75

STATIONARY ASH TRAY AND MATCH HOLDER
Diameter of tray, 7 inches; height of match holder, 3 inches.
No. 9860 Per set $3.75

SMOKING SET—FOUR PIECES.
Set contains tray, diameter 6⅝ inches; ash receiver, diameter 2¾ inches; cigar jar, height 5¾ inches and match holder, height 3 inches.
No. 9861 Per set $4.25

MARMON

"The Easiest Riding Car In The World"

SATISFIES the natural desire for enviable distinction in equipage, while meeting the demand for constant and reliable service at the minimum expense for tires and upkeep. With reasonable care it operates smoothly and quietly for many years.

MARMON "32"—32-40 H. P., 120-inch wheel base, self starting, dynamo lighting with body types to meet every requirement and corresponding equipment—$3850 to $4100.

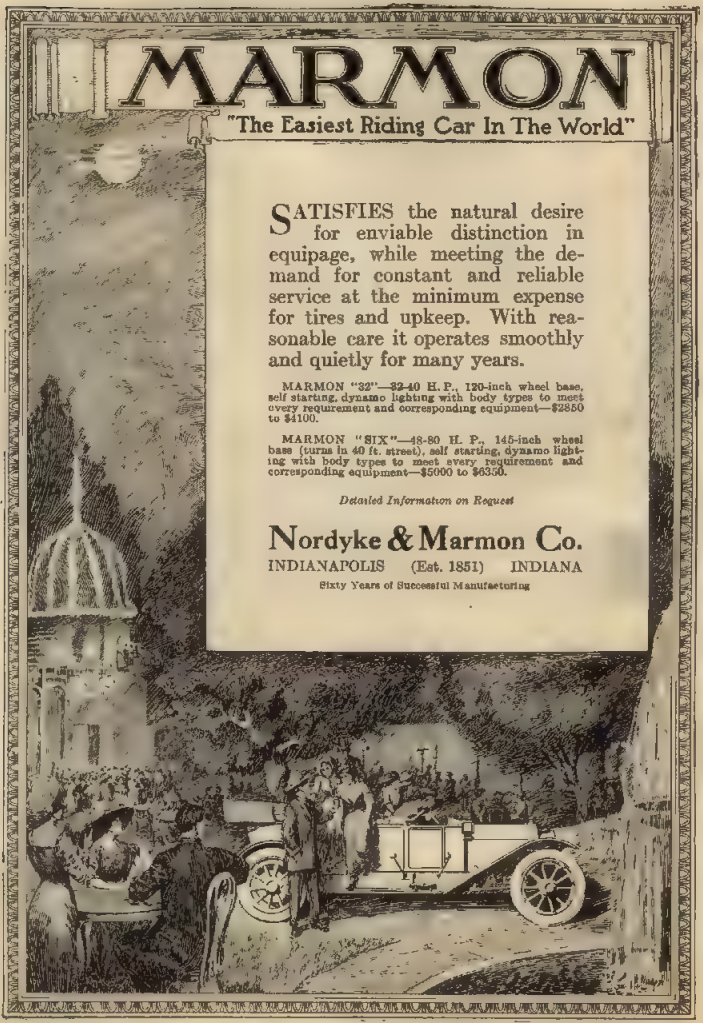
MARMON "SIX"—48-80 H. P., 145-inch wheel base (turns in 40 ft. street), self starting, dynamo lighting with body types to meet every requirement and corresponding equipment—$5000 to $6350.

Detailed Information on Request

Nordyke & Marmon Co.

INDIANAPOLIS (Est. 1851) INDIANA

Sixty Years of Successful Manufacturing



GLASSWARE AND MANTLES

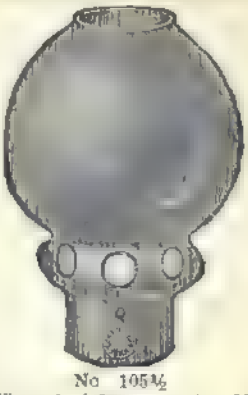
For Gasoline Systems—Arc Pressure and Gravity Lamps. All our Mantles are Regulation Standard Size. Positively will not Shrink or Grow Dim.

No. 427 Clear globe. Each $1.90
No. 427 Opal globe. Each 2.20
Used on No. 43 Lamp Only.

No. 105
Mica chimney for system and pressure lamps.
Price, each $0.80

No. 110½
8-inch opal dome; per doz $6.70
Used on No. 6 Lamp Only.

No. 634. Post Globe.
Per dozen $3.50



No. 105½
"QG" opal globes; per doz. $8.35
Used on No. 6A Lamp Only.

Cap Mantle for Gas.

Double wire, all ready to mount; easy to handle. 100 candle power; single weave.

Excelsior cap; per dozen..$4.70

Nulite No. 1, Loop Gravity Mantle, for Gasoline Lamp or Gas.

Single weave single wire 100 candle power. Single weave mantles give best results on gasoline gravity lamps.

Nulite No. 1 Loop Gravity Mantle, per dozen.....$3.50

Mantle for Gasoline System or Pressure Lamps.

600 candle power. Made especially for System or Pressure gasoline lamps, single weave, 4½ inches long, can be used with center post or side rod.

Nulite Arc, rolled skirt; per dozen $6.40
Cosmo Arc; per dozen..... 6.00

THE NULITE TABLE LAMP

JUST OUT—JUST WHAT YOU WANT

300 C. P.—7 hours on 1 pint of gasoline.

A marvel of light producing excellence, economy and utility.

Height, 24 in.; weight, 7 lbs.; finish, polished nickle.

The light you have been waiting for. The greatest invention of the age in the lighting line, in that it embodies all the features of beauty, efficiency, durability, safety, economy and utility.

A FEW FACTS ABOUT THE NULITE TABLE LAMP

Appearance.

Its beautiful appearance and the unexcelled quality of the light it produces makes it a fit and desirable illuminant for the best homes, or even palaces; its economy of operation and small initial cost place it within reach of the poorest as well as the well to do.

Uses and Advantages.

Its utility makes it an article for universal use, wherever an artificial light is needed this lamp can be used to good advantage. Being portable it can be moved from room to room, thus in many places taking the place of an entire system, this feature will make it especially attractive among the people who cannot afford a lighting system.

Storekeepers can use this lamp for lighting dark corners storerooms, basements, etc., where no system lamps are installed. Bankers can use it as a desk light on dark days and when working evenings and as a night lamp for in front of the vaults.

Hospital attendants find that the light produced by this lamp does not hurt the most delicate eyes and also that it is the best of all illuminants for operating rooms, filling prescriptions, etc., because it is steady, powerful, penetrating, has no glaring effects and shows everything in its true color.

In most places saloons and cafes are compelled by law to keep a light burning all night, the Nulite Table Lamp will answer the purpose better than anything else and save 90% of the cost of operating any other style of night lamp.

Schools, Offices, Etc.

For night schools, offices, hotels libraries and all other places where people congregate, work or read this lamp will be found a decided improvement over other mediums.

The Ideal Light for Residences.

In homes, most of all, this lamp is an almost absolute necessity. Every home in the world should use this lamp because it is a better light than any other is handier, more economical, safer, more attractive, cheaper and longer lived than any other home lighting medium ever introduced. It is better than a gasoline system because it is portable and cheaper and just as safe, it is better than kerosene because it gives ten times as much light as a kerosene lamp at the same cost and is therefore ten times as cheap, besides being safer, cleaner and less troublesome to operate and take care of, has no dirty wicks, chimneys or burners to clean, makes no smoke, no odor and no dirt. It is better than gas or electricity because of the quality of the light and is ten times as cheap; besides, gas or electricity can only be obtained in cities. It is better than acetylene because it is cheaper to install and to operate, is much safer and has the advantage of being portable.

Explicit and Thorough Instructions With Each and Every Lamp.

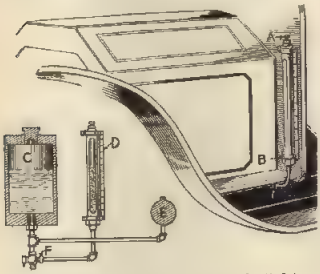
PACKED SECURE, SAFE DELIVERY ASSURED.

Price, each $21.25
Price, in lots of six; each..... 14.20

Every Country Merchant is Selling Them.—Why Not You! Buy a Sample Now and Five Later so as to Enjoy Our Quantity Special Price.

Safety Gasoline Gage

The illustration shows a gasoline gage which is the manufacture of the Emergency Novelty Manufacturing Company, Port Huron, Mich. This gasoline gage is adapted to motor cars and is designed to be placed upon the engine side of the dash board so as to register the amount of gasoline in tank by the action of gravity. This gage is made of polished brass and may be attached as shown in the illustration. The smaller cut



The Emergency Novelty Company's Safety Gage

shows the manner in which the gage may be attached to the feed pipe running from the gasoline tank to the carburetor. When the tank is filled the gasoline does not enter the gage until the valve at B is open, which is accomplished by pressing down push-button A. Should the glass in any way be broken no gasoline is wasted except the small amount contained in the gage. D is a scale reading in gals. after adjustment. F is a drain cock to drain off impurities or water.

The Loring Two Point Suspension Torpedo Frame

This frame, which is manufactured by B. C. Loring, Providence, R. I., can be made with square or pointed ends having one yoke or spider fastened to four ends of axle springs and one yoke or truss fastened to frame, the two swiveled together by a ball or hinge joint, with guide springs, on either side to arrest the rocking. This idea of frame construction was designed, so that when traveling over an uneven road, either wheel may be raised considerably above the plane of the other wheels without imparting any torsional strain to the body frame, although the frame is spring supported.

The coil springs that adjust the rocking are placed between the lower spider and frame, which hold the body in proper horizontal or balanced position, thus, it is claimed, making it impossible to impart any twisting strain to the frame, because the latter is capable of rocking laterally on two points, which are in turn supported by the lower spiders. Owing to the fact that the body frame is mounted at two points, so as to rock laterally independently of its supporting springs, it is claimed, the body frame may yield, or either axle may yield, without imparting any sudden shock to the axles' springs, over rough roads and without requiring the use of shock absorbers.

Safety Set Screw

The Allen Screw is a practical, safety set screw. It is made from a high test steel bar, by a patented process strengthening the metal. The screw is strong, thick at the bottom, giving it great pressure-resisting qualities. It is claimed not to break or

The Allen Safety Set Screw.

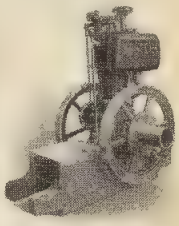
mushroom; it is said you can't make any impression on the hexagon shape of hollow; you can put your whole strength into the pull, the screw will not be hurt

This safety screw is manufactured at 135 Sheldon Street, Hartford, Conn., by the Allen Set Screw Manufacturing Company.

One H. P. Gasoline Engine

This is a four cycle engine with a bore of 3¼ in. and a stroke of 4 in., and is manufactured by the Frost Gas Engine Company, Evansville, Wis.

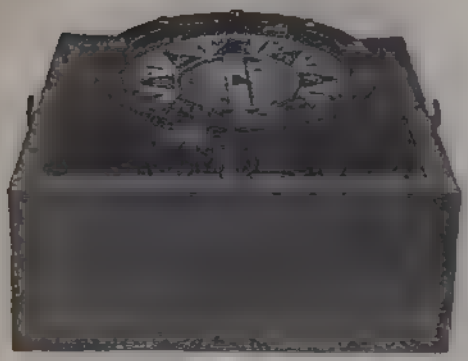
The crank case is a separate casting from the cylinder. The valve cages are also made in one piece with a top yoke cast to form a cap through which the main bolts pass to fasten to the base.



The Water-Cooled Hustler.

The passage way of the fuel and air to the combustion chamber goes through the cooling water, and in this way the mixture is preheated. The valves are entirely surrounded by water, and the combustion chamber is free from pockets. The fly wheel is 18 in. in diameter and has a speed of 500 r. p. m. The ignition is by jump spark and lubrication is by sight feed oiler. The engine is mounted on a skid so that it can be easily placed anywhere. All parts are interchangeable.

COMPASSES



SPIRIT BOAT COMPASSES

	Each
No. 1200—Suitable for Yachts and Small Vessels, Has 2 in. Floating Needle, Jeweled, All Metal Parts of Brass, Oxidized Copper and Mahogany Case, Gimbal Mounting	$8 50

Weight 1¾ Lbs. Each.

MINERS' COMPASSES OR DIPPING NEEDLES

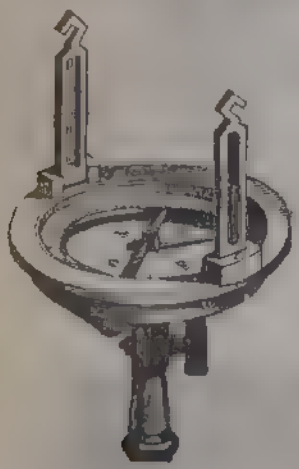
Used by Miners, Prospectors, etc., to aid in locating Iron Ore

When in use the Observer should hold the ring in his hand and allow the compass to hang vertical, starting with the west or the west end of the needle will point to a point proportional to the mass of iron, and when brought over a mass of iron, will dip, indicating with certainty the presence of ore. When held horizontally it can be used as an ordinary compass.

No. 1206—Magnetic Needle is 2½ in. Long, Balanced upon a Horizontal Axis, within a scale graduated from 0 to 90 Degrees Each Way. All Enclosed in a Ring Frame, Gun Metal Finish with Brass or Bone Sights	$13 00

One in a Leatherette Case. Weight 12 Oz. Each

SURVEYORS' FOLDING SIGHT COMPASSES



Bar Needle, Jeweled, Slide Stop; Two Spirit Levels in Face of Dial, Raised Ring, Full Circle Division, Figured 0 to 360 Degrees, Folding Hook Sights; Brass Case, with Jacob's Staff, Ball and Socket Mountings

	Each
No. 1201—2¾ in. Needle; Weight 1½ Lbs.	$12 00
No. 1202—3⅛ in. Needle; Weight 2 Lbs.	15 00
No. 1203—3½ in. Needle; Weight 2¼ Lbs.	18 50

One in a Case

Bar Needle, Jeweled, Slide Stop; Raised Ring, Full Circle Division, Figured 0 to 360 Degrees, Folding Hook Sights; Brass Case, with Jacob's Staff, Ball and Socket Mountings

	Each
No. 1204—2⅛ in. Needle; Weight 1¼ Lbs. Each.	$ 9 60
No. 1205—2⅝ in. Needle; Weight 1½ Lbs. Each.	12 20

One in a Case

FOLDING SIGHT POCKET COMPASSES

Bar Needle, Jeweled, Slide Stop; Raised Ring, Full Circle Division, Figured 0 to 360 Degrees; Folding Hook Sights, Brass Case.

	Each
No. 1207—2 in. Needle; Weight 8 Oz. Each.	$5 50
No. 1208—2½ in. Needle; Weight 10 Oz. Each	7 20
No. 1209—2½ in. Needle; Weight 12 Oz. Each	8 20

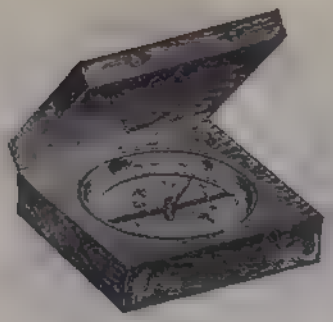
One in a Case

Hinged Cover, Nickel Hunting Case; Bar Needle, Jeweled, Slide Stop; Raised Ring; Full Circle Division, Figured 0 to 360 Degrees; Folding Sights.

	Each
No. 1210—Case 2 in. Diameter, 1⅛ in. Needle	$6 50

One in a Box; Weight 4 Oz. Each

POCKET COMPASSES



GURLEY PATTERN

GENUINE GURLEY

In using the Gurley Pattern and Gurley Compasses keep the South End toward the Person, and read the Bearings from the North End of the Needle. The E. & W. Letters on the Face are reversed from their natural position, in order to have the North End of the Needle always rest on the direction of the Line of Sight.

Mahogany Case with Sight Line in Lid; Bar Needle Jeweled Automatic Stop; Metal Dial, Raised Ring Graduated 0 to 360 Degrees; Designed Expressly for Woodmen and Guaranteed Accurate

Per Dozen

No. 1211—3x3 in. Case, 2 in. Needle... $36 00

No. 1212—Rosewood Case; Otherwise same as above; 3x3 in. Case, 2 in. Needle... 27 00

One Dozen in a Package; Wt. 4 Lbs. per Dozen

Government Pattern Mahogany Case with Sight Line on Lid; Superior Jeweled Needle, Automatic Stop; Metal Dial, Raised Ring.

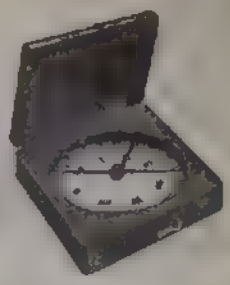
Each

No. 3154—3x3 in. Case, 2 in. Needle; Full Circle Division, Figured 0 to 360 Degrees... $7 00

One Dozen in a Package; Wt. 4 Lbs. per Dozen

No. 3155—3¾x3¾ in. Case, 2¼ in. Needle, Quarter Circle Division, Figured 0 to 90 Degrees each way... 9 00

One Dozen in a Package, Wt. 8 Lbs. per Dozen



Mahogany Case, Bar Needle Jeweled, Automatic Stop; Metal Dial, Full Circle Division Figured 0 to 360 Degrees; Beveled Glass Face.

Per Dozen

No. 1215—3x3 in. Case, 2 in. Needle... $27 00

One Dozen in Package; Wt. 3 Lbs. per Dozen

No. 1216—3¼x3¼ in. Case, 2½ in. Needle... 30 00

One Dozen in a Package; Wt. 4½ Lbs. per Doz.

Mahogany Case, 3x3 in.; 2 in. Straight Needle, with Automatic Stop

Per Dozen

No. 1217—Card Dial, Full Circle Division, Figured 0 to 360 Degrees... $9 00

One Dozen in a Package; Wt. 2 Lbs. per Doz.

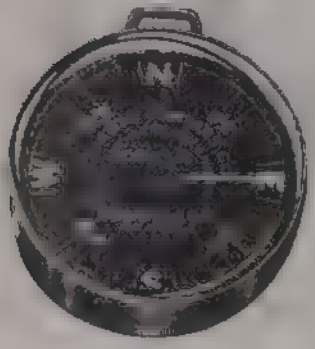
No. 1218—Metal Dial, Jeweled Needle, Lettered but not Graduated or Figured... 12 00

One Dozen in a Package, Wt. 2 Lbs. per Dozen

No. 1219—Metal Dial, Jeweled Needle, Full Circle Division, Figured 0 to 360 Degrees... 18 00

One Dozen in a Package; Wt. 2 Lbs. per Dozen

KRAEMER "PATHFINDER" COMPASSES



No. 1213

The Fob

No. 1214

Especially designed for the Hunter, Motor Tourist, Yachtsman and Aeronaut. Has been adopted by the Automobile Association of America and the National Sportsmen's Association. It is Reliable, Strong, Efficient, Durable and Simple, and is constructed of the finest quality Metal no paper or film is used, therefore it is not affected by water. The Letters N, E, S, W are Luminous, and after exposing the Compass to a strong light, it can be read as plainly in the dark as in the daylight.

Each

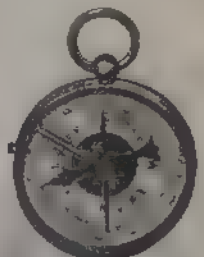
No. 1213—2 in. Solid Brass Case, Highly Polished and Lacquered, Moisture and Dust Proof, with 1⅜ in. Floating Disk Dial of Aluminum, Black Velvet Finish with Luminous Letters, 360 Divisions; Needle of Specially Prepared Magnetic High Carbon Steel; Heavy Tool Steel Pivot with Large Jewel Cap Bearing, with Beautiful Leather Fob and Indian Head Emblem; Red Sight Line running from Center to Outer Edge of Glass on under side of same which takes the place of ordinary Sight Compass. To use same turn the Instrument so that the Sight Line comes over the desired degree and Sight over the Red Line, enabling the User to run an Accurate Line... $2 50

One Dozen in a Box; Weight 2⅓ Lbs. per Doz.

Each

No. 1214—2 in. Solid Brass Case, Highly Polished and Lacquered, Moisture and Dust Proof, 1¾ in. Four Point Needle of Aluminum, Black Velvet Finish with Luminous Letters; Lower Dial of Aluminum, Black Velvet Finish, with Pearl Letters, 360 Divisions, Needle of Especially Prepared Magnetic High Carbon Steel, Heavy Tool Steel Pivot with Large Jewel Cap Bearing, with Beautiful Leather Fob and Emblem... $2 50

One Dozen in a Box; Weight 2⅓ Lbs. per Dozen



EXPLORERS' OR HUNTERS'

When leaving camp, find North with Needle, placing the N on Dial directly under the Needle; then turn the Bottom which turns the Arrow until the Arrow points in the direction it is desired to travel. The Compass is now adjusted.

Per Dozen

No. 1220—2 in. Heavy Brass Open Case, Solid Ring Covered Metal Dial, Graduated 0 to 360 Degrees Revolving Base with Oxidized Arrow; Jeweled Needle, with Stop... $24.00

One Dozen in Box; Weight 1½ Lbs. per Dozen

POCKET COMPASSES

Nickel [illegible] Watch Pattern, Hunting Case Spring Cover, Bar Needle, [illegible] Case, Automatic Stop; Silvered [illegible] Quarter Circle Division, Figured [illegible] 90 Degrees Each Way.

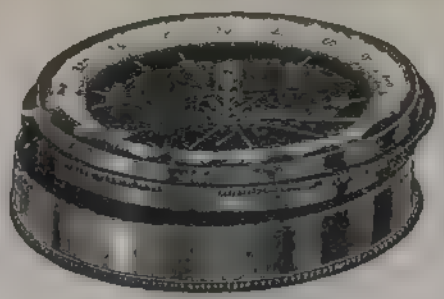
Per Dozen

No. 1221—1¾ in. Diameter $42 00
Weight 1¾ Lbs. [illegible]

No. 1222—2 in. Diameter 46 20
Weight 2¼ [illegible] per Dozen

No. 1223—2 in. [illegible], Nickel Hunting Case, [illegible] Metal Dial, [illegible] in Degrees, Agate Center, Automatic S[illegible] 24 00
Weight 2¼ Lbs. per Dozen

No. 1224—1¾ in. Diam., Gun Metal Watch Shape Open Case Card Dial [illegible] 6 00
Weight 1¼ Lbs. per Dozen
Half Dozen in a Box



Brass Case, Slip Cover; Bar Needle, Jeweled, Automatic Stop; Black Metal Dial with White Letters, Making it particularly suitable for a Night Compass. Raised Ring, Full Circle Division, Figured 0 to 360 Degrees, Beveled Glass Face.

Per Dozen

No. 1228—2 in. Diameter $27 00
Weight 2¼ Lbs. per Dozen

No. 1229—2¼ in. Diameter 30 00
Weight 3 Lbs. per Dozen

No. 1230—2¼ in. Diameter 33 00
Weight 3½ Lbs. per Dozen

Brass Case, Slip Cover; Bar Needle, Jeweled, Automatic Stop; Metal Dial, Full Circle Division, Figured 0 to 360 Degrees.

Per Dozen

No. 1234—2 in. Diameter $22 20
Weight 2¼ Lbs. per Dozen

No. 1235—2⅜ in. Diameter 24 00
Weight 3¼ Lbs. per Dozen

No. 1236—2¼ in. Diameter 30 00
Weight 4½ Lbs. per Dozen
One Dozen in a Box

Brass Case, Hinged Cover, Straight Needle, Jeweled, Slide Stop; Metal Dial, Full Circle Division, Figured 0 to 360 Degrees. Per Dozen

No. 1225—1¾ in. Diameter. $17 50
One Dozen in a Box; Wt. 1½ Lbs. per Dozen

No. 1226—2 in. Diameter .. 18 00
One Dozen in a Box; Wt. 1¾ Lbs. per Dozen

MARBLE
SPORTSMEN'S

Bracket is made like a Double Safety Pin and fastens securely to Coat, Vest or Belt, enabling the wearer to always have his Compass in view.

Per Doz

No. C82—1½ in. Diameter Nickel Plated, Waterproof Case, Jeweled Needle Revolving Card Dial .. $18 00
One Dozen in a Box
Weight 1½ Lbs. per Dozen

Brass Case, Slip Cover, Straight Needle, Brass Capped, Slide Stop; Metal Dial, Beveled Glass Face.

Per Dozen

No. 1237—1¾ in. Diameter $10 10
Weight 1¼ Lbs. per Dozen

No. 1238—2 in. Diameter 11 20
Weight 1¾ Lbs. per Dozen
One Dozen in a Box

Brass Watch Case Pattern, Open Face, Brass Capped; Straight Needle, Metal Dial, Beveled Glass Face. Per Dozen

No. 1227—1¾ in Diameter $6 60
Weight 1 Lb. per Dozen
One Dozen in a Box

Brass Watch Case Pattern, Open Face, Brass Capped, Flat Needle, Card Dial, Quarter Circle Division, Figured 0 to 90 Degrees Each Way, Beveled Glass Face.

Per Dozen

No. 1231—1⅛ in. Diameter $4 00
Weight ⅔ Lb. per Dozen

No. 1232—1¾ in. Diameter 4 30
Weight 1 Lb. per Dozen

No. 1233—2 in. Diameter 4.70
Weight 1¼ Lbs. per Dozen
Half Dozen in a Box

Brass Case, Slip Cover, Brass Capped, Flat Needle; Card Dial, Quarter Circle Division, Figured 0 to 90 Degrees Each Way; Beveled Glass Face.

Per Dozen

No. 1239—1¾ in. Diameter. $3 50
Weight ¾ Lb. per Dozen

No. 1240—1½ in. Diameter 4.00
Weight 1 Lb. per Dozen

No. 1241—1¾ in. Diameter 4 30
Weight 1¼ Lbs. per Dozen
Half Dozen in a Box

ELECTRIC SIGNS

Materials used—The Background and Letters of Pacific Signs are made of Heavy Galvanized Iron. The Receptacles are Porcelain with Copper Shells, held in place by means of a Screw Cap on the Outside of Sign. A Rubber Washer between this Cap and the Sign excludes all moisture and insures its being absolutely watertight. Rubber Covered Wire is used throughout Sign and all connections are soldered under Set Screws and covered with a Special Insulating Compound. These Signs are guaranteed to meet all the requirements of Fire Insurance Inspectors.

Backgrounds—Backgrounds are finished in Blue, Red, Green, Maroon or Black Smalts, as may be desired, with raised Aluminum or Gilt Borders

STYLE "D"

STYLE "M"

STYLE "N"

Letters are finished with White Enamel Faces or insides and any colored Enamel outside. We can supply the regular Pacific Channel or Grooved Letters, shown in cuts, or the Pacific Raised Block Letters, at the same price. These last letters have their faces raised two inches from the surface of the sign, (instead of flush with it) and do not have the spurs shown on the Channel Letters.

We recommend that signs be finished with Blue Smalt Background, Red Sided Letters and Aluminum Borders, as this Combination will give the most brilliant, pleasing and lasting results, and all Signs will be finished in this manner, unless otherwise ordered

In Ordering, state—

Style Number.
Single or Double Face or Combination.
Letters to appear on Sign.
Height of Letters.
Kind of Letters—Channel, Raised or Flush.
Choose Colors or accept our recommendation.
Steady or Flashing Light.
Candle Power and Kind of Lamps.
Ladder Steps on Vertical Style.

STYLE "D"

Length 9 ft. 3 in., Width 2 ft. 7 in.; Pacific Channel Letters 16 in. High

	Each
No. D1—Single Face Sign, Base Price..... Weight 180 Lbs. Crated	$26.00
No. D2—Double Face Sign, Base Price..... Weight 200 Lbs. Crated	38.00
No. D3—Combination Face Sign, Base Price..... Weight 190 Lbs. Crated	38.00

STYLE "M"

Length 10 ft., Width 36 in.; Pacific Channel Letters, 16 in. High

	Each
No. M1—Single Face Sign, Base Price..... Weight 180 Lbs. Crated	$24.00
No. M2—Double Face Sign, Base Price..... Weight 200 Lbs. Crated	36.00
No. M3—Combination Face Sign, Base Price..... Weight 190 Lbs. Crated	36.00

STYLE "N"

Length 10 ft., Width 36 in., Pacific Channel Letters, 16 in. High

	Each
No. N1—Single Face Sign, Base Price..... Weight 180 Lbs. Crated	$30.00
No. N2—Double Face Sign, Base Price..... Weight 200 Lbs. Crated	44.00
No. N3—Combination Face Sign, Base Price..... Weight 190 Lbs. Crated	44.00

How to Figure Cost of Signs

Horizontal or Vertical are the same price

For the convenience of our customers, we have arranged the different Signs with what we call a **Base Price for the Sign.** We also charge a certain amount for each Electric Letter. **To find the cost of any Sign,** multiply the price of the size letter selected, by the number of letters to appear on sign, and add to the amount thus obtained the Base Price for the style selected

Price List for the different size Pacific Channel and Pacific Raised Block Letters

Height Letters	12	16	20	24	30	36
Per Letter	$8.00	10.00	12.00	15.00	18.00	22.00

Plain Surface Letters, that is, Electric Letters Enameled directly on background of Sign and not raised, are 20% less than Pacific Channel or Block Letters. Frequently, we have calls for Signs with one Electric Face and one Face with Enameled Non-electric Letters. These are called **Combination Signs** and are sometimes just as effective as Double Electric Face Signs. These Signs sell for the Base Price of a Double Face Sign, with cost of Letters used, plus $1.50 per running foot for painting the Plain Side.

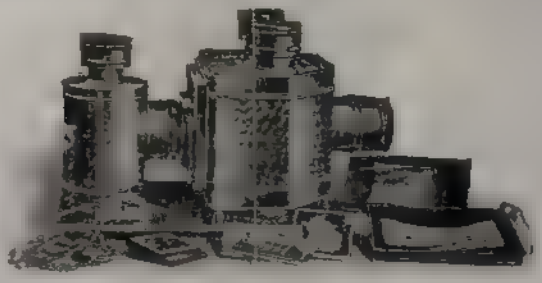
If Sign is to be wired for Flashing, add $1.50 for each Flash of the circuit extra. We can equip Vertical Signs with Ladder-Steps at $1.50 per foot extra. To illustrate these prices, the style "M" Sign with 16 in. letters as shown in cut, would cost $64.00 for the single face, or the sum of $24.00 for Base Price plus $40.00 for four 16 in. letters at $10.00 each. The same sign in Double Face would cost $116.00 or the sum of $36.00 for Base Price and $80.00 for eight 16 in. letters at $10.00 each. Or the same Sign as a Combination would cost $87.25 made up of $36.00 for Base Charge and $40.00 for four 16 in. letters at $10.00 each and $11.25 for painting seven and one half running feet at $1.50 per foot

The above prices are for the complete sign F. O. B. cars La Crosse and include crating charges, Hanging Irons and Guy Wires and Electric Wiring, but do not include Lamps. Either two or four candle power Carbon Lamps may be used with these signs, the two candle power being the size most commonly selected. If desired, 4 candle power Mazda Lamps may be used but the sign must be especially wired for same. There is no extra charge for wiring a sign for Mazda Lamps but it must be specified on order, when this type of Lamp is to be used.

RADIOPTICANS OR PICTURE PROJECTORS

Picture Projectors of one form or another such as magic lanterns, etc. have been in use for many years, but not until the advent of the Radioptican has there been a machine with all the real merits of a genuine Home Entertainer for young and old; It has the advantages of recent strides in the science of illumination, lens grinding, electric lighting, etc., which produces sharper pictures, greater luminosity, various sized pictures and improved appearance. Any Picture, Photograph or Postal Card may be reproduced with Radiopticans listing at $10.00 or over, as the picture holders on these are adjustable to all sizes. Study, Games, Shadow Plays, Comic Cuts, Stage Scenes and Illustrated Songs are some of the amusements produced by this machine.

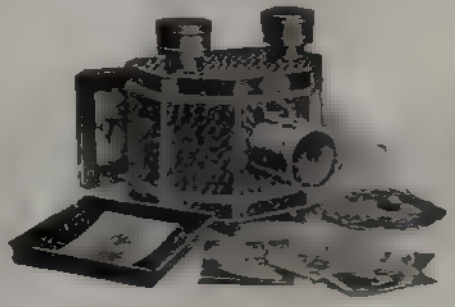
Lens can be focused so that the size of images illuminated are approximately one-half the size of the distance of machine from Screen or Wall. Unless otherwise specified they are fitted with lamps for 104 to 112 Volt Circuits for Direct or Alternating Current. Fitted with Double Lens System and New Parabolic Reflectors.



Each

No. 346—Projects both Opaque Pictures and Lantern Slides; Lantern Slide Compartment is fitted with Condensers, giving an even illumination of 3¼x4 in. Standard Slides Equipped with Special Stereopticon Lamp. Lantern Slide Compartment is ventilated to avoid heat from Lamp; Pictures may be shown continuously or alternately, Length 23 in. Width 13 in., Height 15 in. $25.00

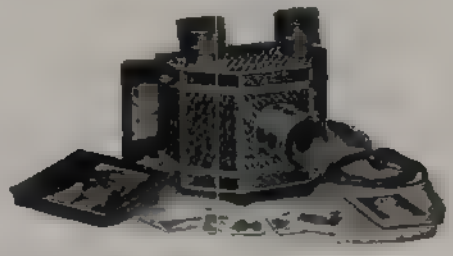
Weight 35 Lbs. Each



Each

No. 351—Equipped with Concave Convex Lens which will illuminate sharply to the extreme edge of prints and photographs up to 5x7 in. without adjusting holder. Fitted with Rack and Pinion focusing device (shown in cut). Two High Candle Power Mazda Lamps and 12 feet of Electric Cord; Highly Polished Oxidized Copper with Bright Copper Bands. Length 13½ in., Width 13¼ in. Height 13½ in. $25.00

Weight 14 Lbs. Each



Each

No. 341—Will cover Prints and Photographs up to 4x5 in., without adjusting Holder; Fitted with two High Candle Power Mazda Lamps, and 12 ft. Electric Cord; Picture Holder will receive any picture up to 5½x7½ in.; Highly Polished Oxidized Copper with Bright Copper Bands. Length 13½ in., Width 13¼ in., Height 13½ in. $15.00

Weight 14 Lbs. Each

Each

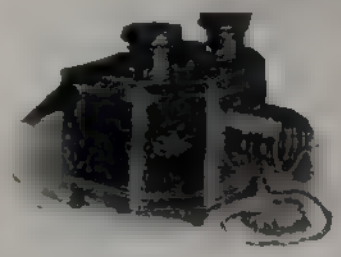
No. 331—This Model has Double Sliding Backs, Adjustable Picture Holders; Light Tight Ventilators and Rubber Feet; Two 60 Watt Lamps and 10 ft. of Electric Cord. Picture Holders will receive any horizontal picture up to 8½ in. Long x 5½ in. Wide or any Vertical Picture up to 8 in. High x 5½ in. Wide; Highly Polished Oxidized Copper with Bright Copper Bands; Length 12 in., Width 11¾ in., Height 13 in. $10.00

Weight 10½ Lbs. Each

Each

No. 321—Takes Standard or Extra Long Post Cards up to 3½x6½ in.; Two 60 Watt Lamps and 8 ft. of N. C. Electric Cord; Hinged Back on which is mounted the New Curved Rotatable Picture Holder avoiding delay between pictures; Highly Polished Oxidized Copper with Bright Copper Bands; Length 11 in.; Width 11¾ in., Height 11¾ in. $7.50

Weight 8½ Lbs. Each



No. 311—Same Design and Finish, but smaller throughout, otherwise same as No. 321; It yields as large, bright sharp images as the higher priced machines. Length 10 in., Width 9¾ in., Height 10¾ in. $5.00

Weight 6¼ Lbs. Each

Each

No. 301—A New Model and far superior to the common tin box type or low priced machines; Lenses are ground and polished giving the sharpest possible pictures; Has two Incandescent Lamps and is light tight; All parts are securely riveted together, no Solder being used; Picture Holder will take Post Cards of different lengths or pictures smaller than Postals Lithographed instead of Painted, eliminating scorching and odor; Length 6¼ in.; Width 9¼ in., Height 8¾ in. $2.50

Weight 4 Lbs. Each

NOTE—We can furnish any of the above Radiopticans fitted with Acetylene or Gas Lamps to Special Order at the Same List Price

ANVILS

PARAGON

Paragon Anvils are Made of the Finest Quality Swedish Steel. The Face and Body are One Piece, therefore no weld exists and the face never separates from the Body. The Face is of harder steel than the body and properly tempered

BLACKSMITH
For General Forging Purposes

	Per Pound
No. 1P—Weight, Lbs., 70, 75, 80 and 85	$0.20
No. 2P—Weight, Lbs., 90, 100, 110, 120, 130, 140, 150, 160, 180, 200 230, 240, 250, 280, 300, 350 and 400	.18

HORSE SHOERS' CLIP HORN

Clip Horn facilitates the drawing of Clips and saves the Anvil Face Two Pritchel Holes at Heel; Narrow Face; Full Round Horn; Best Shape for Horseshoers.

	Per Pound
No. 3P—Weight, Lbs., 125, 130, 135, 140 and 150	$0 22

Dimensions of Blacksmiths' Patterns

Weights Anvil Lbs.	75	100	125	150	175	200	250	300	350	400	Clip Horn 125	Clip Horn 135	Clip Horn 150
Face Size, In.	3⅜x12	3⅝x13	4⅛x14¼	4¼x15¼	4⅜x15¼	4⅝x15¼	5x17¾	5¼x19¾	5½x20½	5¾x21	3⅜x15½	3¾x16	4x16½
Height Anvil, In.	8½	9¼	10	11	11¼	12⅛	13½	14	14½	15	10	10½	11
Length of Horn, In.	7½	8	8¾	9¾	10	11	11½	12½	13¾	15	10¾	11½	12
Hole Square, In.	¾	¾	⅞	1	1	1	1	1¼	1¼	1¼	⅞	⅞	⅞
Holes, Round, In.	½	⅝	⅝	⅝	⅝	⅝	⅝	¾	¾	¾	⅜	½	½

HARDIE HOLE LIST, APPROXIMATE

For Anvils, Lbs	70 to 100	110 to 155	156 to 190	191 to 260	261 to 360	361 to 400
Size of Hole, In.	¾	⅞	1	1⅛	1¼	1⅜

ANVILS

No. 4V—VULCAN

Solid Tool Steel Face, Thoroughly Welded to the Body of Anvil, Accurately Ground and Tempered. Horn is covered with and Its Extremity made entirely of, Tough Untempered Steel; Body of Superior Pig Iron

Size Nos.	2	3	4	5	6	7	8	9	10	12
Wt. Ea., Lbs.	20	30	40	50	60	70	80	90	100	120
Each	$4.00	4.50	5.25	6.00	6.50	7.25	8.00	9.00	10.00	12.00

Open Stock

MANDRELS OR CONES

No. 5M—CAST IRON MANDRELS

Used in Forming Rings of All Kinds and Sizes

Size Nos.	Length In.	Diam., Bottom In.	Diam., Top, In.	Weight Lbs.	Per Pound
1½	40	10	1	90	$0.09
2	48	12	1	115	.09
3	72	14	1	165	.09

ANVILS

PLOW ANVILS

For Sharpening Plow Shares, Straightening Dents in All Farm Implements, Heading Rivets, Clinching Nails, etc.

	Per Dozen
No. 50 Refined Iron, Japanned, Polished Steel Face, Height 6½ in., Diam. Face 3¼ in.	$5.00

Weight 72 Lbs. per Dozen

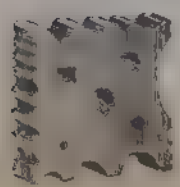
RAIL ANVILS

For General Use by the Farmer, for Light Forging, Riveting, Sharpening Plow Shares, etc.

	Per Pound
No. 6R Made of 40 Lb. Steel Rail, Length 4 in., ½ in. Hole	$0.10

Weight 53 Lbs. per Dozen

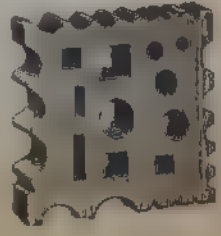
SWAGE BLOCKS



Used by Blacksmiths for Forming Iron to certain Square, Round or Oval Shapes
Use the Inside Holes for Upset Heads of Fullers, Hammers, Etc.

	Per Pound
No. 7S—12½x12½x4 in.; Wt. 100 Lbs.	$0 08
No. 8S—15x15x4 in.; Wt. 160 Lbs.	$0 08

Open Stock



VISES

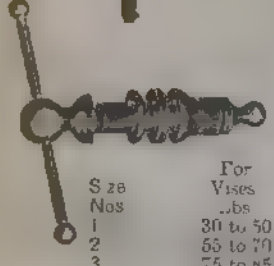
BLACKSMITHS' LEG VISES

Used also by Wagon Makers, Machinists, etc.

Welded Tool Steel Jaws, Polished, File Cut, Properly Hardened; Easily Operated, Shape allows workman to get close to his work for Filing or Chipping.

Nos. and Weights	Width of Jaw and Opening In.	Each
35 Lbs.	4	$10.00
40 Lbs.	4	10.50
45 Lbs.	4¼	11.00
50 Lbs.	4¼	11.50
55 Lbs.	4½	12.00
60 Lbs.	4½	13.00
65 Lbs.	5	14.00
70 Lbs.	5	15.00
75 Lbs.	5¼	16.00
80 Lbs.	5½	17.50
85 Lbs.	5½	18.50
90 Lbs.	5½	20.00
95 Lbs.	5¾	21.00
100 Lbs.	6	22.00
110 Lbs.	6¼	24.00
120 Lbs.	6½	26.00
130 Lbs.	6¾	29.00
140 Lbs.	7	33.00

Open Stock



STEEL BOXES AND SCREWS

For Blacksmiths' Vises

Size Nos	For Vises ..bs	Diam. of Screw In.	Weight Each Lbs.	*Each
1	30 to 50	1⅛	8	$ 7.00
2	55 to 70	1⅛	12	8.00
3	75 to 85	1½	14	9.00
4	90 to 125	1½	18	13.00
6	130 to 195	1¾	30	19.00

Open Stock

MECHANICS' STATIONARY BENCH VISES

Wrought Iron Body; Hardened Steel Jaws
Adapted to Light or Heavy Work

Nos.	Width Jaws, In.	Jaws Open, In.	Weight Each, Lbs.	Each
43½	3½	4	28	$ 7.00
44	4	6	40	8.50
44½	4½	6½	50	10.00
45	5	7	70	13.00

OVAL SLIDE, Steel Faced Jaws

Used by Farmers, Carpenters, Wood and Metal Workers for All Light Work

Size Nos.	Width of Jaw, In.	Length Over all	Weight Each, Lbs.	Each
82½	2½	11½ in.	7½	$ 2.75
83	3	13 in.	11½	4.00
83½	3½	14 in.	19	5.25
84	4	17 in.	27	7.00

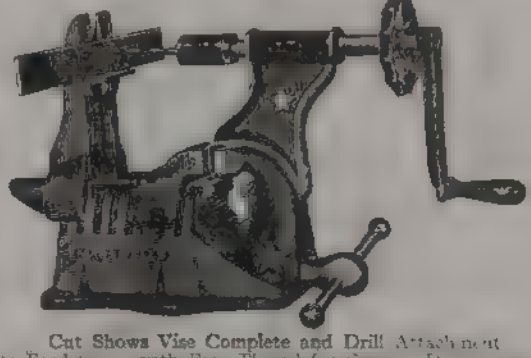
Open Stock

COMBINED VISES AND ANVILS

MARSWELLS

Combined Anvil, Vise and Pipe Holder

Cast Iron Body; ⅜ in Solid Steel Screw, Jaws Faced with Hardened Steel; Face of Anvil Chilled, Ground and Polished; No Springs Strengthening Ribs on Body; 4 in. Jaws, Body 17½ in. Long; Painted Red.



Cut Shows Vise Complete and Drill Attachment

Cut shows Vise Complete and Saw Vise Attachment.

The Sawing Attachment is adjustable and can be used on wood or metal, has a separate Feed Screw with Fine Thread for Filing Purposes. The Saw Vise Attachment sits on the larger Jaw of the Anvil, and will hold a Saw securely, can be used for Woodwork; in repairing Harness, binding Books from ...

	Each
No. 5—12 in. Extension Jaw Vise, Anvil and Pipe Holder, with no Attachments; Weight 50 Lbs. Each.	$5 50
No. 5S—12 in. Extension Jaw Vise, Anvil and Pipe Holder, with Saw Vise Attachment; Weight 55 Lbs. Each.	6 50
No. 5D—12 in. Extension Jaw Vise, Anvil and Pipe Holder, with Drill Attachment; Weight 60 Lbs. Each.	8 50

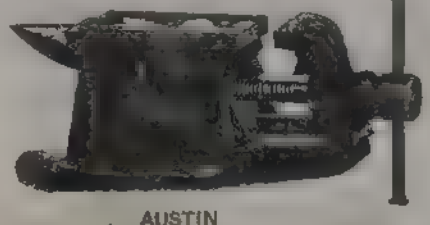
CHENEY

The Small Size is Adapted for use of Jewelers, Amateurs, etc., the Larger Sizes for Householders, Mechanics, Farmers, Miners, etc.

Chilled Iron Anvil, Tempered Steel Faces; Jaw Adjustable to take odd Shaped Articles or May be Removed Entirely.

Size Nos	Width Jaws In.	Jaws Open In	Size Face In	Weight Each, Lbs.	*Each
10	2¼	3	4½x2	12	$ 7.00
20	3¼	4	6½x3	30	9.00
30	3¾	5	8x3½	41	11.00
40	4½	6	8½x4	55	13.00

One in a Crate



AUSTIN

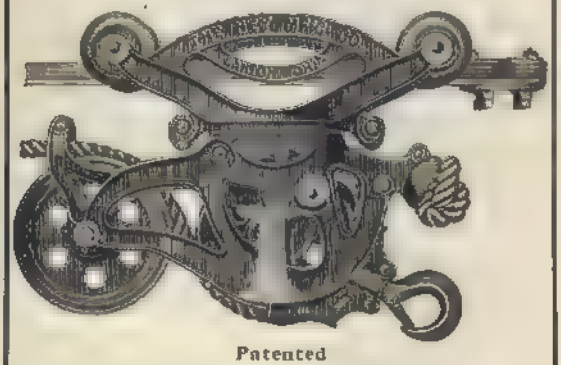
For Farmers, Repair Shops and Light Forging; Horn for Shaping Purposes

	Each
No. 321—Wrought Iron Body, Polished Hardened Steel Face ... 7x3 in.; Width of Jaws 3 in., open 4 in. Weight 28 Lbs. Each	$3 50

Open Stock

Genuine NEY Haying Tools

Another NEY Success



Patented

With Rope Sheaves, No. 170
With Cable Sheaves, No. 175

This is the lightest draft Fork Carrier ever made The large 7-inch Sheaves are roller bearing, thus greatly reducing friction. It is a perfect wide mouth and will allow the lifting pulley to be carried as near the track as other carriers using small sheaves The Travelers cover a large track space

Extra Heavy and Strong. Finely Finished in Aluminum. Write for Catalogue.

The Ney Manufacturing Company
CANTON, OHIO

Buch's Wheelbarrows

There should be no sympathy wasted on wheelbarrows. If the wheel is right, the box strong enough, the handles of proper length, and the whole made of good material, they will stand hard work and careless—some other make should be put in stock.

The wise man will let the other fellow pay for experience—customers are hard enough to get without gambling with a chance of losing them.

Cinch it with Buch's Barrows

Write for details.

A. Buch's Sons Company
ELIZABETHTOWN, PENN.

PENNSYLVANIA

LAWN MOWERS

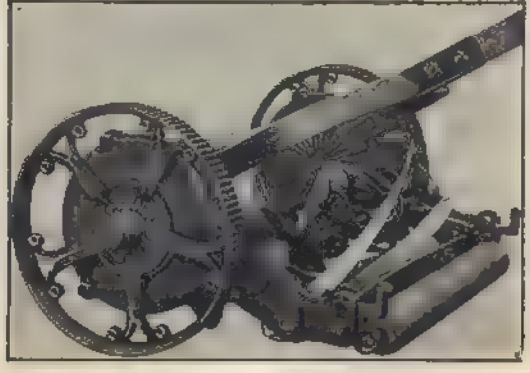
Cost more to make, but they cost less to use.

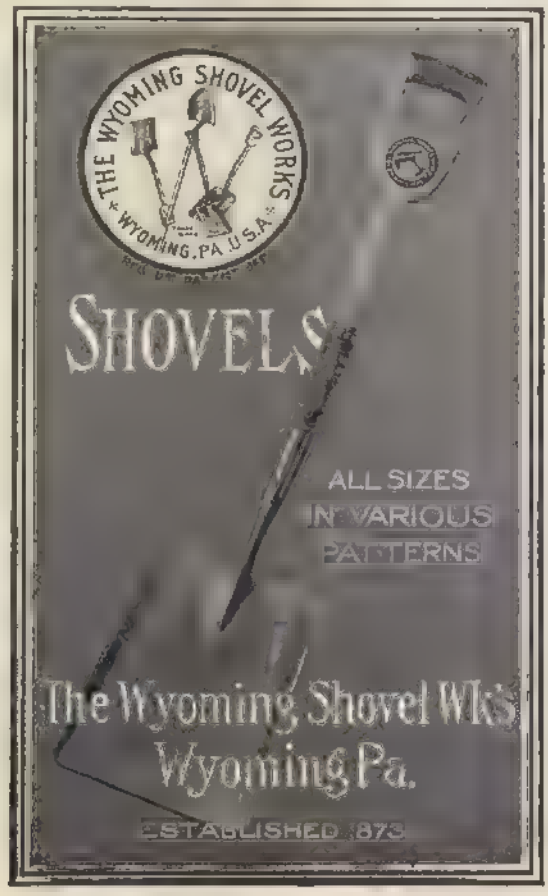
It's economy to buy Pennsylvania

Our national advertising makes them easy to sell.

For Catalogs and Prices

Supplee Hardware Company
PHILADELPHIA





Store Ladders
"Take Off Your Hat to The Myers!"
MYERS
Tandem Adjustable Barn Door Hangers
The Myers Hay Unloader
F. E. MYERS & BRO. :: :: ASHLAND, OHIO

Competition forbids increasing profits by raising prices, but it don't forbid increasing sales by selling a better line. More sales mean bigger profits—you give more and get more when you sell

HAYES PUMPS

Made a little different—a little better than other, cost no more, sell easier and oftener. Our catalog shows a long line of profit makers—pumps of special design construction and adaptability.

HAYES PUMP & PLANTER CO.
GALVA, ILL.

CHADBORN & COLDWELL MFG. CO.

NEWBURGH, N. Y.

1868 - 1912

44 Years in the

Lawn Mower Field

Send for Catalogue showing

13 Styles of Hand Mowers

and

3 Styles of Horse Mowers

also

Special Mowers for Golf Greens, Etc.

All our mowers are
Fully Guaranteed

Chicago Office: 176 W. Lake St.

Hendricks' Commercial Register

EVERYTHING you may have to buy is listed in this new edition. There are over 350,000 names and addresses of American Manufacturers classified under 35,000 headings and representing about every Machine, Material, Tool, Apparatus and specialty required in the Architectural, Engineering, Mechanical, Electrical, Manufacturing, Railroad, Mine, Mill, Quarrying and all kindred industries. Over 1500 pages, 7½ x 10 inches. Cloth. Price, $10.00 delivered.

David Williams Company

239 WEST 39th STREET NEW YORK CITY

COX

CLEAR VISION AUTOMATIC WIND SHIELDS

THE KIND THEY TALK ABOUT

Whatever the Car, we have the Size and Style best suited for it.

A Catalogue for the asking, with all details. Can we mail you one?

COX BRASS MFG. CO.

ALBANY, NEW YORK

Vesburg Street, Albany, New York
1777 Broadway, New York City
899 Boylston Street, Boston, Mass.
870 Woodward Avenue, Detroit, Mich

ESTABLISHED 1872

BALL THRUST BEARINGS

STEEL BRASS **BALLS**

American Ball Co., Providence, R. I.

HAZARD UNIT POWER PLANT

Motor, Clutch, Transmission and Gear Shift Control all in One Compact Unit.

Center control, Three Point Suspension, Oil Tight, Dirt Proof, Gear Reduction Integral with Unit Power Plant permits straight line shaft drive to live rear axle. Automatic inclosed Governor. No time limit to Our Guarantee. Full descriptive Catalog on Request.

HAZARD MOTOR MFG. CO.

189 Coates Street Rochester, N. Y.

"Invader" Auto Oil

Light—Medium—Heavy

The best the world affords, the kind that has never deviated from one standard of ULTRA-HIGH QUALITY, regardless of the temptations of competition.

CHAS. F. KELLOM & CO.

113 Arch St., - - Philadelphia

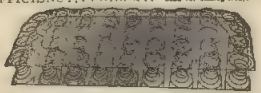
NEW ENGLAND BRANCH: 284 Columbus Ave., Boston

PERFECT SPRINGS

Why experiment with springs of various makes when you can purchase

Soft Edge Cushion Springs

and be assured of the very best and most perfect springs it is possible to buy. SOFT EDGE CUSHION SPRINGS are unrivaled for DURABILITY, EFFICIENCY, ECONOMY. Send for catalog today.



National Spring & Wire Company

Albion, Michigan Windsor, Ont.

Eureka Honey Comb Radiator

All radiating surfaces—no fins—one of the most efficient coolers made.

Very strong and handsome. Built in any size or design.

Sample Price—Model 10 Buick—$36.00

"WILL OUTLIVE YOUR CAR"
Absolute Satisfaction Guaranteed

EUREKA AUTO PARTS MFG. CO.

3025-27-29 Olive Street - St. Louis, Mo.

"THE STANDARD OF ACCURACY"

EMBODIED IN OUR PRODUCT OF

Die Cast: Bearings, Throttle and Timer Cases, Water and Oil Pumps, Magneto and Timer Parts, Valve Tapper Guides, etc., etc.

AMERICAN DIE CASTING CO.

Gardner Lane and White River

INDIANAPOLIS, IND.

DOVER Saval Funnel

Simply lift the funnel from filling hole and no more gasoline can run through. Send for 1912 catalogue.

Positive in action, simple in construction and everlasting in quality.

DOVER STAMPING & MFG. CO.

Cambridge, Mass.

Beats tools; beats tinkering.
Puts a quick and final quietus on radiator leaks.
Pour it in; run engine ten minutes.
Drain out and fill with clear water.

SE-MENT-OL
"CHEMICALLY CORRECT"
Modern garage men use it instead of solder and tools.
All up-to-date motorists carry it in their cars.
Price 75¢
THE NORTHWESTERN CHEMICAL CO.
Marietta, Ohio.

The CARVER
COMPOUND DOUBLE-ACTING
PUMP

¶ Works on a new principle. (Patented.)
Not at all like any other pump

¶ It is without exception the **easiest working and fastest pump made.**

¶ Makes a power pump unnecessary: costs less, is more convenient and more dependable.

PRICE, $10.00
from your dealer or direct, prepaid, from us.

¶ We have some descriptive matter showing the difference between this and the ordinary pumps. May we send it to you?

C. H. NEWTON, Manufacturer
32 Treat Place, Newark, N. J.

Model F. & M.
TO WIND TURN RIM.

Phinney-Walker Keyless Clocks
We manufacture the most complete line of automobile clocks in the world.
PRICED FROM $7.00 TO $33.50.
These clocks are handsome in appearance. They are built especially for automobile service.
Phinney-Walker Keyless Clock Company
81 E. 130th ST., NEW YORK CITY

Marathon Automobiles
MANUFACTURED BY THE
MARATHON MOTOR WORKS
NASHVILLE :: :: :: :: TENNESSEE

Beats tools; beats tinkering.
Puts a quick and final quietus on radiator leaks.
Pour it in; run engine ten minutes.
Drain out and fill with clear water.

SE-MENT-OL
"CHEMICALLY CORRECT"
Modern garage men use it instead of solder and tools.
All up-to-date motorists carry it in their cars.
Price 75¢
THE NORTHWESTERN CHEMICAL CO.
Marietta, Ohio.

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Not at all like any other pump

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STEEL BRASS **BALLS**

American Ball Co., Providence, R. I.

HAZARD UNIT POWER PLANT

Motor, Clutch, Transmission and Gear Shift Control all in One Compact Unit.

Center control, Three Point Suspension, Oil Tight, Dirt Proof, Gear Reduction Integral with Unit Power Plant permits straight line shaft drive to live rear axle. Automatic inclosed Governor. No time limit to Our Guarantee. Full descriptive Catalog on Request.

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189 Coates Street Rochester, N. Y.

"Invader" Auto Oil

Light—Medium—Heavy

The best the world affords, the kind that has never deviated from one standard of ULTRA-HIGH QUALITY, regardless of the temptations of competition.

CHAS. F. KELLOM & CO.

113 Arch St., - - Philadelphia

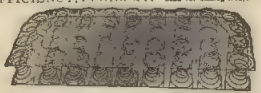
NEW ENGLAND BRANCH: 284 Columbus Ave., Boston

PERFECT SPRINGS

Why experiment with springs of various makes when you can purchase

Soft Edge Cushion Springs

and be assured of the very best and most perfect springs it is possible to buy. SOFT EDGE CUSHION SPRINGS are unrivaled for DURABILITY, EFFICIENCY, ECONOMY. Send for catalog today.



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Eureka Honey Comb Radiator

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Very strong and handsome. Built in any size or design.

Sample Price—Model 10 Buick—$36.00

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Die Cast: Bearings, Throttle and Timer Cases, Water and Oil Pumps, Magneto and Timer Parts, Valve Tapper Guides, etc., etc.

AMERICAN DIE CASTING CO.

Gardner Lane and White River

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DOVER Saval Funnel

Simply lift the funnel from filling hole and no more gasoline can run through. Send for 1912 catalogue.

Positive in action, simple in construction and everlasting in quality.

DOVER STAMPING & MFG. CO.

Cambridge, Mass.

PIPE WRENCHES

Used by Machinists, Pump Men, Farmers, Pipe Fitters, Plumbers, Engineers, etc., on Pipe, Shafts, Bars or any other Round Smooth Surface

No. 125—TRIMO, All Steel

Polished Head and Jaws; Japanned Handle Drop Forged from Bar Steel; All Parts Interchangeable

Does not Lock on the Pipe, but Releases its hold readily. Does not Crush the Pipe or Slip. The Movable Jaw and the Nuts are made with a Round Top and Bottom Thread and will not Strip nor Burr; an inserted Jaw in the Handle allow both to be Renewed at little expense.

Length Open, In.	6	8	10	14	18	24	36	48
Takes Pipe..	⅛-½	⅛-¾	⅛-1	⅛-1½	⅛-2	⅛-2½	⅛-3½	1-5
Wt. Ea., Lbs.	½	¾	1¼	2¾	5¼	8	16	24
Each	$2.00	2.00	2.25	3.00	4.00	6.00	12.00	18.00

6 to 24 in., Six in a Box; 36 and 48 in., Two in a Box

Inserted Jaw Nut Frame Movable Jaw

EXTRA PARTS FOR TRIMO WRENCH

Price Each

For Wrench, In.	6	8	10	14	18	24	36	48
Movable Jaw	$0 67	67	75	1 00	1 33	2 00	4.00	6 00
Inserted Jaw	.25	.25	.33	.50	.55	.65	1 00	1 25
Frame	.25	.25	.33	.45	.55	.65	1 00	1 00
Nut	.20	.20	.27	.35	.42	.50	.65	.80
Spring	.03	.03	.03	.03	.04	.04	.04	.04
Pin	.03	.03	.03	.03	.04	.04	.04	.04

Open Stock

No. 130—COCHRAN

Drop Forged Head and Jaws, Japanned Handle. Has no Pins to Break or Strip and Cannot Lock or Crush a Pipe; Frame and Handle are one Piece, Jaws also made of Best Grade Tool Steel, Strongly Reinforced. No small Parts to Lose. Roller Rockers in place of ordinary Nuts. Releases instantly when Pressure is Removed.

Length Open, In.	8	10	14	18	24	36
Takes Pipe, In.	¼ to 1¼	¼ to 1½	¼ to 2	¼ to 2½	¼ to 3	¼ to 3½
Wt. Each, Lbs.	1¼	2	3¾	7	12½	26
Each	$2.00	2 25	3 00	4.00	6.00	12.00

Six in a Box

EXTRA PARTS FOR COCHRAN WRENCHES

The following Five Simple Parts make up the Wrench

Price Each

For Wrench, In.	8	10	14	18	24	36
No. 1—Hook Jaws	$0 67	.75	1.00	1.33	2 00	4 00
No. 2 Inserted Jaws	25	33	50	55	72	1 00
No. 3 Rockers	20	28	40	50	65	1 00
No. 4 Nuts	20	28	35	42	55	80
No. 5 Springs	12	14	17	.21	25	40

Open Stock

STILLSON

Drop Forged from Bar Steel. All Parts Interchangeable. Does not Crush nor lock upon the Pipe, but releases its hold instantly. Takes anything round, square or hexagon

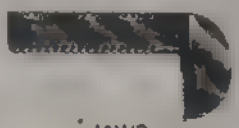
No. 135—LENGTHS 6 TO 14 IN., With Hardwood Handle

Length Open, In.	6	8	10	14
Takes Pipe, In.	⅛ to ½	⅛ to ¾	⅛ to 1	⅛ to 1½
Weight Each, Lbs.	⅜	⅝	1	2½
Each	$2.00	2.00	2.25	3.00

No. 140—LENGTHS 18 TO 48 IN., All Steel

Length Open, In.	18	24	36	48
Takes Pipe, In.	⅛ to 2	⅛ to 2½	⅛ to 3½	1 to 5
Weight Each, Lbs.	11¼	8	18½	22
Each	$4.00	6.00	12.00	18.00

6 to 24 in., Six in a Box; 36 in., Two in a Box



JAWS

FRAMES AND NUTS

EXTRA PARTS FOR STILLSON WRENCHES

For Wrenches, In.	6	8	10	14	18	24	36	48
Each	$0 75	.75	.80	1.00	1 33	2 10	4.75	7.25

For Wrenches, In.	6	8	10	14	18	24	36	48
Frames, Each	$0 35	35	.40	50	.55	.80	1.30	1 50
Nuts, Each	.11	.11	.14	.17	.22	.35	.55	.95

PIPE WRENCHES

No. 145—GENUINE WESTCOTT PIPE

Adjustable, Drop Forged Steel, Tempered; Polished Jaws, Japanned Handle; can be used in many places inaccessible to an ordinary wrench, such as in corners, against walls, etc. Jaws will Not lock on the pipe.

Length, In.	6	8	10	12	14
Takes Pipe up to In.	½	¾	1	1¼	1½
Weight Dozen, Lbs.	5¼	15	25	36	60
Per Dozen	$12.00	15.00	18.00	24.00	30.00

Half Dozen in a Box

MONKEY WRENCH PIPE JAWS

ELGIN WRENCH JAWS

Can be instantly attached to any Monkey Wrench converting it into a Pipe Tool. Very useful around Gas Engines, Windmills, Implements, etc.; Railroad Men use large quantities; Malleable Iron, Japan Finish, Steel Adjustable Hook and Knurl, Inserted Steel Teeth

	Per Dozen
No. 1—For 8 and 10 in. Monkey Wrenches	$4 00
No. 2—For 10 and 12 in. Monkey Wrenches	4 00
No. 3—For 12 and 14 in. Monkey Wrenches	5 00

Note—No. 2 is the best seller

One Dozen in a Box; Weight 4 Lbs. per Dozen

CHAIN PIPE WRENCHES OR TONGS

Used by Pipe Fitters, Plumbers, Engineers, Machinists, Pump Men, Etc., for Gripping, Turning or Holding Pipe, Fittings, Shafting, Bolts, Bars, Nuts, Etc.

VULCAN-BIJAW, FLAT LINK

Wrought Steel Handle Drop Forged, Double-Ended Reversible Jaws Saw Tempered Teeth, can be sharpened with a file Hand Made Chain, of special steel, swings from the center and can be used on either side of the Jaws, work on straight pipe or fittings in corners against walls between floors, in ditches, etc.

Size Nos.	31	32	33	33½	34	35
Takes Pipe, In.	¾ to 1½	¾ to 2½	¾ to 4	1 to 6	1½ to 8	2 to 12
Length, Over-all, In.	20	27	37	44½	50½	64½
Length of Chain, In.	13½	17½	22½	31	39	54½
Breaking Strain, Lbs.	6,700	9,800	12,500	14,300	15,700	21,800
Weight Each, Lbs.	5¾	10	16	24	31	50
Each.	$3 50	5.00	7.00	9.00	11.00	18.00

Above Wrenches can be supplied with Cable Link, instead of Flat Link Chain when so ordered

EXTRA PARTS FOR VULCAN-BIJAW WRENCHES

CHAINS, FLAT LINK

For Size Nos.	31	32	33	33½	34	35
Weight Each, Lbs	1½	2	2½	5	7	13½
Each.	$1.00	1.50	2.50	3.25	4.00	6.00

CHAINS, CABLE LINK

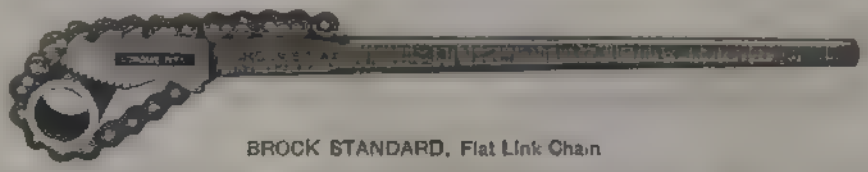
For Size Nos.	31	32	33	33½	34	35
Weight Each, Lbs.	1½	2	2½	5	5	11½
Each.	$0.75	1.00	1.75	2.00	2.50	4.00

JAWS

For Size, Nos.	31	32	33	33½	34	35
Weight Pair, Lbs.	2	2½	3½	4½	6	8½
Per Pair.	$1.75	2.75	4.00	4.75	5.50	7.50

BOLTS

For Size, Nos.	31	32	33	33½	34	35
Each.	$0.10	.10	.12	.15	.18	.25



BROCK STANDARD, Flat Link Chain

Drop Forged, Bar Steel Handle and Chain; interchangeable Jaws with three rows of hardened tempered Teeth, Jaws are Inserted in Head, will not pull off; Chain is quickly adjusted.

Size Nos.	2	3	3½	4	5
Takes Pipe, In.	¼ to 3	¾ to 6	1 to 8	1½ to 10	2 to 14
Length Over-all, In	27	37	44	50	64
Length of Chain, In.	17½	22½	31	39	54½
Breaking Strain, Lbs.	9,800	12,500	14,300	15,700	21,800
Weight Each, Lbs.	8	16	21	28	46
Each.	$5 00	7.00	9.00	11.00	18.00

EXTRA PARTS FOR BROCK STANDARD

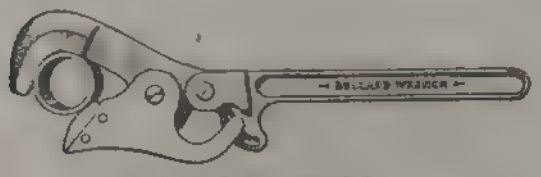
CHAINS

For Size, Nos.	2	3	3½	4	5
Weight Each, Lbs	2½	4	5	6	11
Each.	$2.00	3.00	3.50	4.00	6.00

JAWS

For Size, Nos.	2	3	3½	4	5
Weight Each, Lbs	2	4½	5	11	23
Each.	$1.37	2.00	2.25	2.50	3.00

PIPE WRENCHES



BULLARD AUTOMATIC

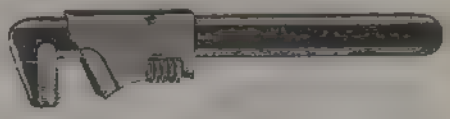
Can be Operated with one hand; impossible to crush the lightest pipe All Steel Polished Inner Jaws Solid Bar Steel Removable Tool Section is Tool Steel, hardened A Spring keeps Jaws together when upside down

Size Nos.	10	11	12	13	14
Length, In.	7¾	9½	12½	17	19
Takes Pipe In	⅛ to ¼	⅛ to 1¼	⅛ to 1½	½ to 2½	¾ to 3
Weight Each, Lbs.	¼	1	2½	4¾	5¼
Each.	$0.75	1.15	1.35	1.80	2.75

Sizes 10 to 12, One Dozen 13 and 14, Half Dozen in a Box

EXTRA JAWS

For Wrenches, Nos.	10	11	12	13	14
Each	$0.20	.25	.35	.50	.50



DUDLY

All Steel, Polished Jaws and Frame Japanned Handle, Sure Grip, Quick Release, All Parts Interchangeable, This Wrench will be appreciated for its simplicity and great strength, the Lower Jaw is set at an angle to prevent Pipe from Sticking when Wrench is turned.

Nos	70	90	120
Length Over-all, In.	7	9	12
Takes Pipe In	⅛ to ¾	⅛ to 1	⅛ to 1¼
Weight Each, Lbs	9	12	21
Per Dozen.	$12.00	15.00	20.40

Half Dozen in a Box

PLUMB BOBS

No. 2. Iron, adjusted top, weight 2 oz. each, per dozen ..$1.45

One dozen in a box

No. 00. Iron, adjusted top, weight 1 [illegible] per dozen ..... $[illegible]

One-half dozen in a box

No. 11. Highly finished full nickel plate, weight 5½ oz. each, per dozen.....$1.50

One dozen in a box

Cast Brass

Steel Pointed, Screw Top

No. 5. Weight 6 oz. each, per dozen.....$ 7.25
No. 6. Weight 11½ oz. each, per dozen..... 10.00

One-half dozen in a box

(Illustration full size)

Hexagon Steel

No. 16. Length 3¾ in., weight 8 oz. each, nickel-plated.....per dozen, $3.50

Accurately made from hexagon steel rod and fitted with screw mechanism. The [illegible] covers slip [illegible] to ensure true alignment

One-half dozen in a box

"GROVER" FILE HANDLES

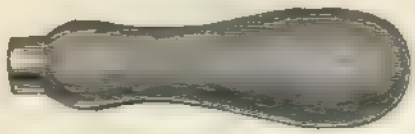
The ferrule never wears out. New fillers of best white birch can always be furnished. Handle and ferrule are locked by the bead. Made in five sizes.

Nos.		1	2	3	4	5
Length, in		4	4½	5	5½	6¼
Handle and ferrule	per gross,	$5.00	5.50	6.50	7.75	10.50
Fillers only	per gross,	2.00	2.40	3.10	4.20	5.50

One-quarter gross in a box

HANDLES

FILE HANDLES

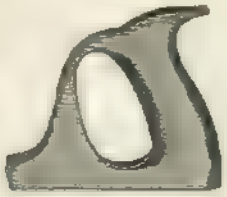


With Brass Ferrules

No. 960. Large, 3 dozen in a paper box, per gross.....$3 75
No. 961. Medium, 3 dozen in a paper box, per gross.... 3 25
No. 962. Small, 3 dozen in a paper box, per gross..... 3 00

PLANE HANDLES

No. 985



No. 988

No. 985. Jack, per dozen.....$0 50
No. 987. Jack, bolted, per dozen..... 1.25
No. 988. Fore, per dozen..... .75
No. 989. Fore, bolted, per dozen..... 1.50

PATENT PEGGING AWL HANDLES

No. 6. Patent pegging awl handles, leather top, steel screw and nut, with wrench, per dozen.....$1 00

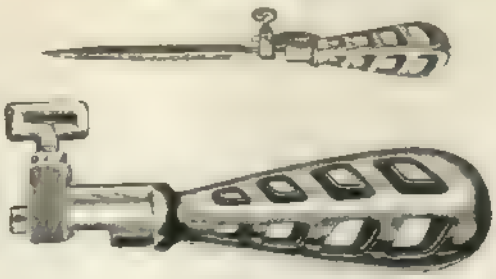
One dozen in a box

BRAD AWL HANDLES

With Brass Ferrules

No. 968. Assorted sizes, polished, 3 dozen in a paper box, per gross..... $3 50
No. 969. Assorted sizes, oil finished, 3 dozen in a paper box, per gross..... 3 00

IXL FILE HANDLES



IXL File and Tool Handle, made of malleable iron and tinned, per dozen.....$1.80
Adjustable to [illegible]ny size file or small shanked tools.

One dozen in a display box

SCREWDRIVER HANDLES

With Brass Ferrule

No. 7. Assorted small, per dozen... $1 00
No. 8. Assorted large, per dozen 1 25

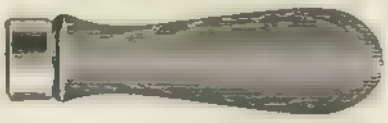
One dozen in a box

PATENT SEWING AWL HANDLES

No. 6½. Patent sewing awl handles, steel screw and nut with wrench, per dozen..... $1 00

One dozen in a box

SOLDERING COPPER HANDLES



No 1. [illegible] size per dozen $1 50
No. 2. [illegible], per dozen 1 25

The same as the Donohue Patent which is a fireproof handle. They are made in two sizes, **Nos. 1** and **2. No. 1,** large, for 4, 5 and 6 lb. coppers, and **No. 2,** small, for 1, 2 and 3 lb. coppers.

One dozen in a box

COMPASSES

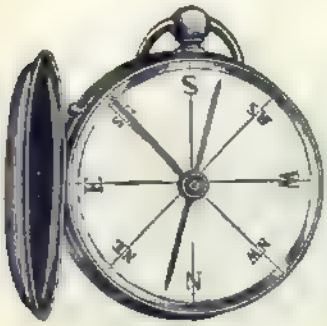
Prices Each

No. 1790.

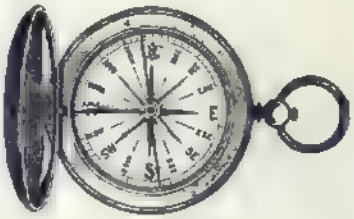
No. 1795.

No. 1700.

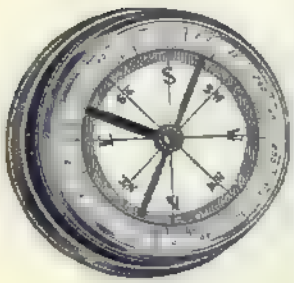
No. 1707.


No. 1710.

No. 1712.


No. 1716

No. 1715.


No. 1722.

No. 1725.

Common German Make for Pocket Use

	25 M.M. 1-inch	30 M.M. 1 1-5-in.	35 M.M. 1 2-5-in.	40 M.M. 1 3-5-in.	45 M.M. 1 4-5-in.	50 M.M. 2-inch
No. 1790 Nickel case, with handle, card dial, brass cap to needle. Each	$ .35	$ .40	$ .45	$ .50	$ 60	
No. 1795 Nickel case, with cover, card dial, brass cap to needle Each		.50	60	65	.75	
No. 1796 Heavy brass case, with handle, silvered metal dial, brass cap to needle, same as cut 1790. Each	.60	.70	.75	.85	.95	1 00

Fine French Make for Pocket Use

		40 M.M. 1 3-5-in.	45 M.M. 1 4-5-in.	50 M.M. 2-inch	60 M.M. 2 2-5-in.	70 M.M. 2 4-5-in.	80 M.M. 3 1-5-in.
No. 1700	Brass case with handle, silvered metal dial, brass cap to needle and stop..... Each	$1.10	$1 20	$1 25			
No. 1702	Same as No. 1700 but with jeweled cap and full divisions on dial ..... Each	1.50	1 55	1 65			
No. 1705	Brass case, silvered metal dial, brass cap to needle, stop and snap cover..... Each	1.40	1 45	1 55			
No. 1707	Same as No. 1705 but with jeweled cap and full divisions on dial ..... Each	1 85	1 95	2 00			
No. 1710	Brass case, silvered metal dial, with brass cap to needle, stop ..... Each	1 75		1 90			
No. 1712	Same as No. 1710 but with jeweled cap and full divisions on dial ..... Each	2 25		2 35			
No. 1714	Watch case style, nickel plated, jeweled needle, automatic stop, full divisions, with spring cover..... Each	3 70	3 85	4 00			
No. 1715	Watch case style, nickel plated, jeweled needle, automatic stop, full divisions..... Each	3.85	4 10	4 25	4 45		
No. 1716	Watch case style, extra fine nickel plated, jeweled bar needle, automatic stop, full divisions, a very fine and accurate compass, with spring cover..... Each	6.15	6 65	7 00			
No. 1717	Brass case with handle, flat needle, jeweled cap, full divisions on silvered metal dial and with revolving bottom, having inner arrow attached to indicate deviation from direction ..... Each		2 50				
No. 1718	Same as No. 1717 with cover..... Each		3 45				
No. 1721	Heavy brass case with movable bottom with silvered metal dial, full divisions, bar needle, jeweled cap, automatic stop and snap cover..... Each	....	...	3 10	3 35		
No. 1723	Same as above, but with full divisions on raised circle..... Each	..		3 35	3 70	4 30	
No. 1724	Same as No. 1725, but with flat needle instead of bar. ..... Each	...	..	...	4 30	5 00	5 80
No. 1725	Heavy nickel-plated case, with pull-off cover, silvered metal dial, full divisions, fine quality bar needle, jeweled, automatic stop..... Each			4 20	4 55	5 20	6 00
No. 1727	Same as No. 1725, but with divisions on raised circle, as shown in cut..... Each	....	..	4 50	4 90	5 55	6 25

MAGNIFIERS

PRICES EACH

Illustrations are Reduced Size

No. 50

No. 51

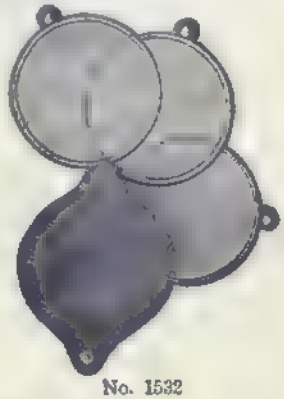
No. 103

MAGNIFYING GLASSES—Rubber Case

			Each
No. 50	One lense.	Diameter of lenses ¾-inch. Approximate total focus 2-inch	$0.85
No. 56	One lense.	Diameter of lenses 1-inch. Approximate total focus 2½-inch	1.05
No. 62	One lense.	Diameter of lenses 1¼ inch. Approximate total focus 3-inch	1 35
No. 68	One lense.	Diameter of lenses 1½ inch. Approximate total focus 4½ inch	1 55
No. 74	One lense.	Diameter of lenses 1¾ inch. Approximate total focus 4½ inch	1 85
No. 78	One lense	Diameter of lenses 2-inch. Approximate total focus 5-inch	2 20
No. 51	Two lenses.	Diameter of lenses ⅝ and ¾-inch. Approximate total focus 2¼ inch.	1 25
No. 57	Two lenses.	Diameter of lenses ⅞ and 1 inch. Approximate total focus 3¼ inch	1 55
No. 63	Two lenses.	Diameter of lenses 1⅛ and 1¼-inch. Approximate total focus 1¾-inch	1 85
No. 69	Two lenses.	Diameter of lenses 1¼ and 1½-inch. Approximate total focus 1½-inch	2.20
No. 75	Two lenses.	Diameter of lenses 1½ and 1¾-inch. Approximate total focus 2-inch	2.90
No. 79	Two lenses.	Diameter of lenses 1¾ and 2-inch. Approximate total focus 2½-inch	3 60
No. 108	Three lenses.	Diameter of lenses ½, ⅝ and ¾-in. Approximate total focus ⅝-in.	1.55
No. 112	Three lenses.	Diameter of lenses ⅝, ¾ and ⅞-in. Approximate total focus ¾-in.	1 85
No. 121	Three lenses.	Diameter of lenses ¾, ⅞ and 1-in. Approximate total focus ⅞-in	2.20

No. 1530

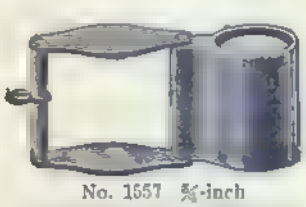
No. 1531



No. 1532

METAL CASE—German Silver, Nickel Plated

			Each
No. 1530	One lense.	Diameter of lenses ¾-inch. Approximate total focus 1¼-inch	$1 25
	One lense.	Diameter of lenses 1-inch. Approximate total focus 2-inch	1.35
	One lense.	Diameter of lenses 1¼-inch. Approximate total focus 3-inch	1.45
No. 1531	Two lenses.	Diameter of lenses ¾-inch. Approximate total focus 2¼ inch	1 55
	Two lenses.	Diameter of lenses 1 inch. Approximate total focus 1¾ inch	1 70
	Two lenses.	Diameter of lenses 1¼-inch. Approximate total focus 1¼-inch	1 85
No. 1532	Three lenses.	Diameter of lenses ¾-inch. Approximate total focus 2 inch	2 20
	Three lenses.	Diameter of lenses 1-inch. Approximate total focus 1¾ inch	2 55
	Three lenses.	Diameter of lenses 1¼-inch. Approximate total focus 1¾-inch	2 90



No. 1557 ¾-inch

No. 1559

ACHROMATIC TRIPLETS AND APLANATIC MAGNIFIERS

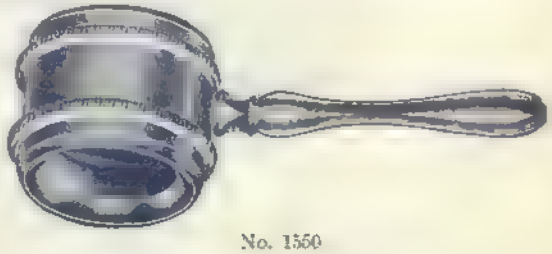
No. 1557 These achromatic triplets are as their name implies, thoroughly achromatic systems composed of one crown and two flint glass lenses cemented together. The image given by them is the nearest approach to that given by the compound microscope, and for preliminary examinations where powers up to twenty diameters are required, will take the place of low-power objectives. They give a very large and flat field, have great depth of focus and give perfect definition even when the optical axis is held at great obliquity. All highly nickel plated

Diameter of lenses ¾-inch. Approximate focus, 1-inch, 11 diameters or 121 times ..each, $1 20
Diameter of lenses ⅞ inch. Approximate focus, ¾-inch, 14 diameters or 196 times each, 1 20
Diameter of lenses 1 inch. Approximate focus, ¾-inch, 20 diameters or 400 times each 1 25

No. 1558 Doublet similar to No. 1557 Diameter of lenses 1-inch. Approximate focus, 1-inch, 12 diameters or 144 times ..... each 2 40

No. 1559 Folding. These Aplanatic Magnifiers, as their name implies, give a perfectly flat field of great brilliancy and exquisite definition entirely free from spherical and chromatic aberration. Nickel plated. Diameter of lenses ½-inch. Approximate focus ¾-inch..each, 2 20

No. 1560 With handle. Diameter of lenses ½-inch. Approximate focus ¾-inch .....each. 1 90



No. 1550

CODDINGTON MAGNIFIERS

No. 1550 Brass case, with brass handle.

Diameter of lense ¾-inch. Approximate lense ½-inch.....each, $2.15
Diameter of lense 1½-inch. Approximate lense 1-inch.....each, 2 75
Diameter of lense 1½-inch. Approximate lense 1¼-inch.....each, 3.00

No. 1544

METAL SCHOOL MAGNIFIERS

German Silver, Nickel Plated

No 1544 Folding Metal Magnifiers with spring cover. Mounted a dozen on a card for display. They sell themselves. Diameter of lenses ⅞-inch. Approximate focus 2-inch. ...each, $0 40

No. 1533

CODDINGTON MAGNIFIERS

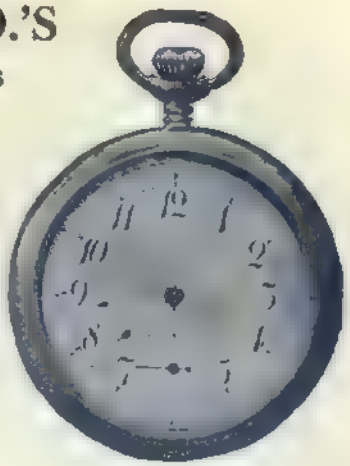
No. 1533 Metal nickel plated case, with folding cover.

Diameter of lenses 15 millimeter. Approximate focus ½-inch..each, $2 60
Diameter of lenses 20 millimeter. Approximate focus ¾-inch..each, 2.80
Diameter of lenses 25 millimeter. Approximate focus ⅞-inch..each, 3.25
Diameter of lenses 30 millimeter. Approximate focus 1-inch..each, 3.80
Diameter of lenses 35 millimeter Approximate focus 1⅛-inch..each, 4.45
Diameter of lenses 40 millimeter. Approximate focus 1-inch..each, 4.90

NEW ENGLAND WATCH CO.'S

Fine Chronographers and Horse Timers

ILLUSTRATIONS ARE EXACT SIZE.



Prices quoted are for complete Watches, An "Ideal" and "Desirable" Chronograph. "Thin Model" 16 size, made in 7 and 11 Jewels, Fitted with "Gun Metal," "Nickel" Silver, 10 year Gold Filled, 20 year Gold Filled, and 14 kt. solid gold cases.

NEW ENGLAND WATCH CO.'S 16-SIZE "THIN MODEL" CHRONOGRAPH AND HORSE TIMER.

Description of Movement.

16-size open face style, thin model, pendant set and stem wind, 1-5 second, start, stop and fly back, quick train, double roller escapement. Cut expansion balance, breguet hairspring, safety barrel. Made in 7 and 11 jewels. Patented.

Open face style, jointed back, front and back crystals, plain polished semi-bassine case as follows:

	Prices, each
No. 3811 Gun Metal case, fitted with 7-jewel movement	$18.00
No. 3812 Gun Metal case, fitted with 11-jewel movement	20.70
No. 3813 Nickel case, fitted with 7-jewel movement	18.70
No. 3814 Nickel case, fitted with 11-jewel movement	20.70
No. 3815 Silver case, fitted with 7-jewel movement	20.70
No. 3816 Silver case, fitted with 11-jewel movement	22.35
No. 3817 10-year Gold Filled case, fitted with 7-jewel movement	22.10
No. 3818 10-year Gold Filled case, fitted with 11-jewel movement	24.70
No. 3819 20-year Gold Filled case, fitted with 7-jewel movement	24.70
No. 3820 20-year Gold Filled case, fitted with 11-jewel movement	27.35
No. 3821 14k Solid Gold case, fitted with 7-jewel movement	70.40
No. 3822 14k Solid Gold case, fitted with 11-jewel movement	73.60

Open face style, jointed back, front and back crystals, engine-turned case with shield or plain, semi-bassine as follows

	Prices, each
No. 3827 Nickel case, fitted with 7-jewel movement	$ 6.00
No. 3824 Nickel case, fitted with 11-jewel movement	18.70
No. 3825 Silver case, fitted with 7-jewel movement	20.70
No. 3826 Silver case fitted with 11-jewel movement	23.35
No. 3827 10-year Gold Filled case, fitted with 7-jewel movement	22.04
No. 3828 10-year Gold Filled case, fitted with 11-jewel movement	24.70
No. 3829 20-year Gold Filled case, fitted with 7-jewel movement	24.70
No. 3830 20-year Gold Filled case, fitted with 11-jewel movement	27.35
No. 3831 14k Solid Gold case, fitted with 7-jewel movement	70.40
No. 3832 14k Solid Gold case, fitted with 11-jewel movement	73.60

Open face style, jointed back, front and back crystals, engine-turned case with shield or plain, semi-bassine, as follows

	Prices, each
No. 3833 Silver case, fitted with 7-jewel movement	$20.70
No. 3834 Silver case fitted with 11-jewel movement	23.35
No. 3835 10-year Gold Filled case, fitted with 7-jewel movement	22.10
No. 3836 10-year Gold Filled case, fitted with 11-jewel movement	24.70
No. 3837 20-year Gold Filled case, fitted with 7-jewel movement	24.70
No. 3838 20-year Gold Filled case, fitted with 11-jewel movement	27.35
No. 3839 14k Solid Gold case, fitted with 7-jewel movement	70.40
No. 3840 14k Solid Gold case, fitted with 11-jewel movement	73.60

Style A

Style B

Style C

Style D

Open face style, jointed back, front and back crystals, semi-bassine case.

	Prices, each		Prices, each
No. 3841 10-year Gold Filled case, fitted with 7-jewel movement	$22.00	No. 3843 20-year Gold Filled case, fitted with 7-jewel movement	$24.70
No. 3842 10-year Gold Filled case, fitted with 11-jewel movement	24.70	No. 3844 20-year Gold Filled case, fitted with 11-jewel movement	27.35

WHEN ORDERING PLEASE GIVE STYLE DESIRED.

LADIES' FINE IMPORTED SWISS CHATELAINE WATCHES

Stem Winding and Stem Setting. Illustrations are exact size excepting No. H-3809.

Open face style gun metal chatelaine watch, jointed case, stem wind and stem set, nickel jeweled movement with tinted enamel dial and fancy gilt hands. Price complete with fleur de lis pin to match.
No. H-3782 Each.....$8.85

Latest Jewel series open face style extra quality polished nickel case, stem wind and stem set, 11 ruby jeweled movement with white enamel dial with
No. H-3783 20 year plain polished case, fitted with 15 jewel "Lancet" movement. Each $25.85
No. H-3784 20 year plain polished case, fitted with 16 jewel "Lancet" movement. Each. 30 00
No. H-3[illegible] 14 Kt solid gold polished case, fitted with 11 jewel "Lancet" movement. Each 38 20
No. H-3[illegible] 14 Kt solid gold plain polished case, fitted with 11 jewel "Lancet" movement. Each 43 [illegible]

Guaranteed Accurate Time Keepers.

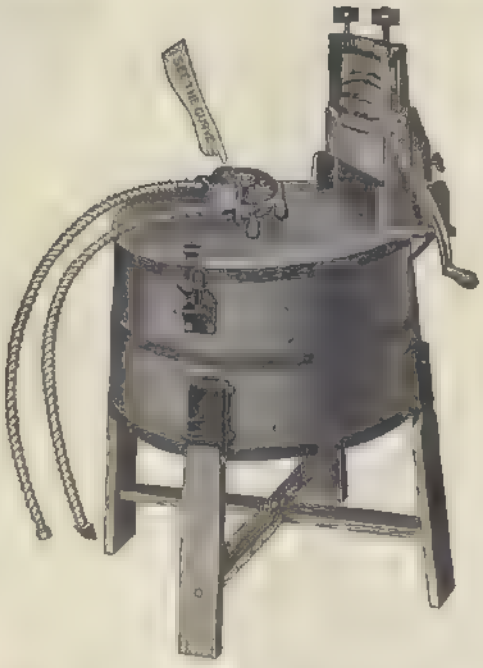
[illegible] kt [illegible] open face style chatelaine stem wind and stem set, plain polished [illegible] jeweled nickel cylinder movement, white enamel dial with fancy gilt hands.
No. H-3787 Each ..$13.35
SAME AS ABOVE, HUNT-STYLE CASE.
No. H-3788 Each $20 00

Open face style gun metal [illegible] white enamel dial with second hand stem wind and [illegible] set [illegible] nickel, highly [illegible] absolutely guaranteed
No. H-3789 With gun metal case Each $13 [illegible]
No. H-3790 With silver case. Each.... 15 85

[illegible] watch, new and at[illegible] [illegible] th Britannia [illegible] swing [illegible] only, [illegible] of [illegible] Move[illegible]
No. H[illegible] $ [illegible]
SAME AS ABOVE WITH GUARANTEED 7 JEWEL LEVER MOVEMENT
N[illegible] $10 70

HUNTING AND OPEN FACE STYLES

[illegible] kt [illegible] ld gold cha[illegible] [illegible] set with 5 [illegible] diamonds. Movement [illegible] bridge model nickel cylinder escapeme[illegible] highly jeweled, and he[illegible] dial with fancy [illegible] Stem wind [illegible] stem set
No. H[illegible] [illegible] [illegible] [



The Washer With The Furniture Finish

The Portland Washing Machine is made with a furniture finish, the wood being varnished and highly polished, for looks and service, both

Better wood -quicker sales.

Better wood—longer life

Your customers will appreciate a decent looking machine—for it goes into their homes

The Portland water motor, you will remember, is the one that runs on fifteen pounds pressure

One of the reasons for Portland superiority is the fact that it is made in one factory—motor, tub and machine complete.

For sale by wholesale hardware dealers everywhere -or shipped direct from us

Portland Mfg. Co.

Portland, - - Mich.

Get Ready To Meet Big Demand For This Machine

Housekeepers are learning more thoroughly every year the possibilities of the Enterprise Cherry Stoner. Where one was sold five years ago ten are sold today. And where one is sold today ten will be sold five years hence.

The fact that the Enterprise Cherry Stoner is an indispensable household machine makes it indispensable to your stock. The name

ENTERPRISE

on these Cherry Stoners, as in every article that leaves the Enterprise plant, stands for the best obtainable service.

Enterprise Cherry Stoners do rapid and effective work. They are far easier to adjust than other machines and the jaws absolutely retain their position when set. The parts of these machines are interchangeable.

It is an absolute certainty that you can readily make sales for these sterling machines among your trade. The fact that every family should have them makes them ready sellers.

In every respect they are up to the high quality of Enterprise Meat and Food Choppers, Sad Irons, Sausage Stuffers, Coffee Mills, etc.

The Enterprise line is the most profitable for you to handle, because Enterprise quality has made it the most popular—the most called for.

Send today for descriptive catalogue showing complete Enterprise Line.

THE ENTERPRISE MANUFACTURING CO. of PA.

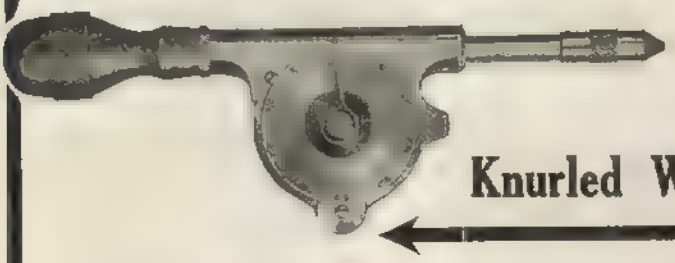
Patented Hardware Specialties

PHILADELPHIA, PA.

31 Murray St., New York 24 W. Lake St., Chicago
544 Van Ness Ave., San Francisco

The Quick Readjustment a Distinctive Feature on the

B & S SPEED INDICATOR



The only speed indicator that can be quickly reset after reading has been made.

Knurled Wheel Facilitates This

Turning the wheel, the rotating disk is quickly brought to zero. This eliminates the necessity of slowly turning the pointer back with the fingers.

There are many other good selling points described in a special folder, which we furnish upon request.

Remember—We Protect the Dealer

BROWN & SHARPE MFG. CO.,

PROVIDENCE, R. I., U. S. A.

A MILLION COATES

YANKEE CLIPPERS

USED EVERY YEAR ALL OVER

THE WORLD

Sales of YANKEE for 1911, showed an increase of 253% over 1910. Watch 1912 sales. Yankee Clippers lead, year after year, both in point of sales and satisfaction given. Are you getting your share of Yankee orders?

Write for one yard of Clippers.

COATES CLIPPER MFG. CO.

WORCESTER, MASS.

JOHN H. GRAHAM & CO., N. Y. **Sole Selling Agents**

PRENTISS MACHINISTS' OR IRON WORKERS' VISES

STATIONARY BOTTOM

Made of Best Norway Iron, Steel Screw, Channel Steel Jaws, Milled and Cut, Adapted to Heavy Work of all Kinds

BULL DOG

Size Nos.	Width of Jaws, In.	Jaws Open, In	Weight Each, Lbs.	Each
50	3½	4	20	$ 6.00
52	4½	6	40	8.50
54	5	8	72	13.00

RAPID TRANSIT

Size Nos.	Width of Jaws, In.	Jaws Open, In	Weight Each, Lbs.	Each
71	3½	4½	30	$ 8.00
72	4½	5½	48	11.00
73	4½	6½	58	13.50
74	5½	8	90	19.00
75	6½	9½	140	28.00

Open Stock

SELF-ADJUSTING JAWS

Made of Best Norway Iron, Steel Screw; Channel Steel Jaws, Milled and Cut, the Self-Adjusting Jaws Grip Tapered or Odd Shaped Pieces, Adapted to Heavy Work

STATIONARY BOTTOM

Size Nos.	Width of Jaws, In	Jaws Open, In	Weight Each, Lbs.	*Each
2	3½	4¾	28	$14.00
3	4½	6	54	21.00
4	5¼	8	92	34.00
5	6	9	142	48.00
6	7	11	184	60.00

SWIVEL BOTTOM

Can be Turned in any Direction and Locked

Size Nos.	Width of Jaws, In.	Jaws Open, In	Weight Each, Lbs.	*Each
19	3½	4¾	35	$17.00
20	4½	6	62	25.00
21	5¼	8	105	36.00
22	6	9	163	54.00
23	7	11	200	70.00

Open Stock

WOOD-WORKERS' VISES

GIPSY

Small Size; a Strong Handy Vise for Common Uses; Wrought Iron, Japanned; Polished Welded Steel Jaws, Milled and Cut, Polished Steel Screw. Head of Swivel Screw moves in Groove running whole length of Bottom Plate, allowing Operator to move Vise out, in or to any desired angle and fasten.

	*Each
No. 66—3½ in. Jaws, Open 4 in. ..... Weight 14 Lbs. Each	$ 6.00

COACH MAKERS' STATIONARY BOTTOM

Medium Size; Designed for Carriage and Wagon Makers, Pattern Makers, General Wood Workers, Car Workers, etc.; made of Wrought Iron, Polished Welded Steel Jaws Milled and Cut, Steel Screw.

	*Each
No. 76—4¼ in. Jaws, Open 9 in. ..... Weight 55 Lbs. Each	$23.00

Open Stock

SELF-ADJUSTING JAWS

Used by Car and Carriage Builders, Furniture Manufacturers, Pattern Makers and Wood Workers; made of Wrought Iron; Polished Channel Steel Jaws, Perfectly Smooth; the Self-Adjusting Jaws Grip Tapered or Odd Shaped Pieces, Adapted to Heavy Work

STATIONARY BOTTOM

Size Nos.	Width of Jaws, In.	Jaws Open, In.	Weight Each, Lbs.	*Each
12	3½	7	30	$16.00
10	4½	9½	59	22.00

SWIVEL BOTTOM

Can be Turned in any Direction and Locked

Size No.	Width of Jaws, In.	Jaws Open, In	Weight Each, Lbs.	*Each
26	4½	9½	67	$26.00

Open Stock

COMBINATION MACHINISTS' AND PIPE VISES

Made of Semi-Steel Castings, with Best Quality Polished Steel Faces, Milled and Fitted to the Jaws. All parts are Interchangeable

SWIVEL BOTTOM

	Each
No. 87—Width of Jaws 3⅝ in.; Holds Pipe up to 2 in.	$16 00

Weight 42 Lbs. Each

STATIONARY BOTTOM

	Each
No. 88½—Width of Jaws 4⅝ in.; Holds Pipe up to 4 in.; Weight 94 Lbs.	$28 00
No. 89½—Width of Jaws 5⅛ in., Holds Pipe up to 6 in., Weight 141 Lbs.	35 00

Designed to meet the requirements for a Serviceable Low Priced article, Made of Semi-Steel, Tool Steel Milled Jaws, Strong and Compact

SWIVEL BOTTOM

Nos	7	8
Width of Jaws, In.	3⅝	4⅛
Capacity	Up to 2 in.	Up to 3 in.
Weight, Lbs.	30	59
Each	$16.00	20.00

STATIONARY BOTTOM

Nos.	8½	9½
Width Jaws, In.	4⅝	5⅜
Capacity	Up to 4 in.	Up to 6 in.
Weight, Lbs.	75	130
Each	$28.00	35.00

Open Stock

COMBINATION VISES

WALWORTH PATTERN

	Each
No 180—Heavy Bench Vise, 5 inch Steel Jaws. Extra Coarse Cut to Grip Pipe Firmly, and as well as Angular Jaws are so Handy and Quick in Use. Takes ⅛ to 6 in. Pipe. Clamps to Bench. All Parts are Interchangeable	$18 00

Weight 77½ Lbs. Each

ALFORD PATTERN

	Per Dozen
No. 370—Length 7 in.; has 1¾ in. Nickel Plated, Tempered Steel Jaws, Opening 1⅛ in.; Hollow Cocobolo Handle, Containing 8 Tools. One Each Brad Awl, Square Reamer, Flat Chisel, Screw Driver, Countersink, Scratch Awl, Long and Short Washer Cutter. Handle can be unscrewed and a Bit Stock used in its place or it can be screwed into a Vise at right angles, necessary in many kinds of work	$21.00

Weight 12 Lbs. per Dozen

HAND VISES

Used by Carpenters, Mechanics, Machinists, Cabinet Makers, etc.

HAND VISES

BOSS HAND

	Per Dozen
No. 900—Holds Drills, Reamers, or any Small Tool; Case Hardened Head, Natural Finish, Polished Jaws; Length 6 in.; Width of Jaws 1¼ in., Opens ¾ in.; Plain Beech Handle, Brass Ferrule	$15 00

Half Dozen in a Box; Weight 6 Lbs. per Dozen

GERMAN PATTERN

	Per Dozen
No. 371—Natural Finish Wrought Iron; 4 in. Long, 1⅛ in. Polished Spring Jaws, Opening ⅜ in	$6 00

Weight 6 Lbs. per Dozen

Half Dozen in a Box

PROSPECTING, STONE AND BRICK TOOLS

ZENITH PROSPECTING HAMMERS

Solid Crucible Steel, Polished and Etched, Selected Hickory Handle; For Prospectors, also used by Blacksmiths for Sharpening Drills, etc.

Nos.	Wt. Less Handle	Wt. per Doz. Lbs.	Per Dozen
Z1	1¾ Lbs.	23	$14.00
Z2	1¾ Lbs.	28	15.00

BRICKLAYERS' HAMMERS

For Laying Brick Pavements, Breaking and Cleaning Bricks, etc.

ZENITH GRADE

Solid Crucible Steel, Polished and Stamped; Selected Hickory Handle

Per Dozen

No. Z20—Size 2, Adze Eye, Length 7 in.; Square Head, Diam. ⅞ in.; Weight Less Handle, 1½ Lbs. $16.00

Weight 25 Lbs. per Dozen

HAND MADE

Hammer Steel, Natural Finish; Selected Hickory Handle

Per Dozen

No. X2—Size 2; Plain Eye; Length 7½ in.; Square Head, Diam. 1⅛ in. Weight Less Handle, 1½ Lbs. $12.00

Weight 25 Lbs. per Dozen

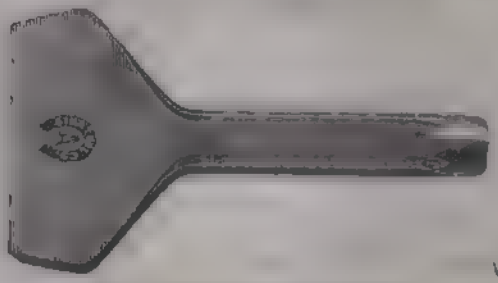
All Half Dozen in a Box

ZENITH PROSPECTING PICKS

Adze Eye

Used by Prospectors and Miners. 13 in. Handle

Size Nos.	Size Head	Wt. Less Handle	Wt. per Doz. Lbs.	Per Dozen
Z1P	⅞x7¼ in.	1 Lb.	17	$15.00
Z2P	1x7¼ in.	1½ Lbs.	24	16.00



BRICKLAYERS' SETS OR CHISELS

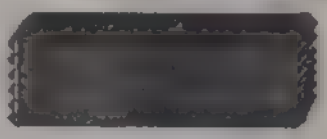
Used for Cutting Brick

Each

No. 1450—Width of Cut 3 and 4½ in.; Solid Steel, Octagon Shank $1.00

Average Weight 1¾ Lbs. Each

Open Stock



STONE CUTTERS' BUSH HAMMERS

Warranted to be the Best Tool Steel, Oil Finish; Without Handles

Each

No. 580B—3 in. Square, 25 Teeth on One End, 36 on Other $7.00

Weight 7 Lbs. Each

No. 5800—1¾ in. Square, 25 Teeth One End, 36 on Other 5.00

Weight 5 Lbs. Each

STONE SLEDGES

Used by Quarrymen, Stone Masons, Etc. for Breaking Stone

Per Pound

No. 740—Weights 7, 8, 9, 10, 12, 14, 16 and 18 Lbs. Each. Cast Steel, Natural Finish, Round Face, Octagon Pein and Peen $0.10

Open Stock

MASONS' HAMMERS

Used by Quarrymen, Masons and Stone Cutters for Dressing Stone

Per Pound

No. 670—Weights 1, 1½, 2, 2½, 3, 3½, 4, 4½ Lbs. Each. Solid Cast Steel, Oil Finish, Octagon Face and Pein $0.15

Open Stock

SPALLING OR STONE HAMMERS

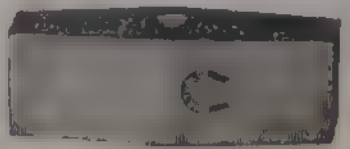
Used by Quarrymen, Stone Cutters, Masons, etc., for Breaking and Dressing Stone. Solid Cast Steel, Oil Finish

FACE AND PEIN

Per Pound

No. 710—Weight, 4½ Lbs. $0.15

No. 710—Weights, 5, 5½, 6, 7, 8, 9, 10, 11, 12, 14 and 16 Lbs. 0.10



DOUBLE FACE

Per Pound

No. 720—Weights, 7, 8, 9, 10, 11, 12, 14 and 18 Lbs. $0.10

Open Stock; For Handles, see page 1022

WOOD CHOPPERS' MAULS

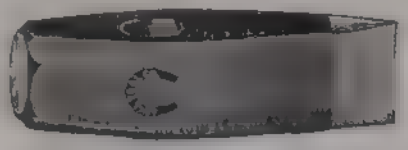
Solid Cast Steel, Oil Finish, Polished Faces

Far Superior to Ordinary Axe, or Maul and Wedge for Splitting Cord Wood, Bass Wood Bolts, Fence Posts, Rails, Etc; the Bit is used the same as a Splitting Axe, the Head as a Maul to drive in the Wedge. The Various shapes and sizes are designed to meet the requirements and ideas of different users

PIERS' SPECIAL, OREGON PATTERN

No 960 ROUND EYE MAULS — Per Pound
Weights 6, 7, 8, 9 and 10 Lbs ... $0 36

No 960A DOUBLE BIT AXE EYE MAULS — Per Pound
Weights 6, 7, 8, 9 and 10 Lbs $0 36



WISCONSIN PATTERN

No 940—STRAIGHT BIT MAULS — Per Pound
Weights 8 9 and 10 Lbs $0 36

WOOD CHOPPERS' MAULS

No 970 CURVED BIT, LAKE SUPERIOR PATTERN — Per Pound
Weights 6, 6½, 7, 7½ and 8 Lbs.....$0.36

WOOD CHOPPERS' WEDGES

Solid Tool Steel, Oil Finish

SPLITTING WEDGES

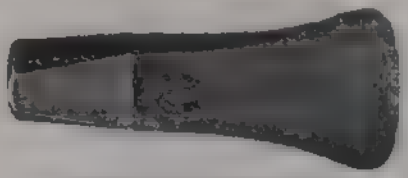
No. 37—REGULAR FLUTED PATTERN — Per Pound
Weights 4, 4½, 5, 5½, 6, 6½, 7, 7½ and 8 Lbs. $0.15

TRUCKEE OR CALIFORNIA PATTERN

	Straight Bit	Per Pound
No 39—Common	Wts 4, 4½, 5, 5½, 6, 6½, 7, 7½ and 8 Lbs	$0 20
No 980 Special	Cast Steel, Wts. 4, 5, 6, 7 and 8 Lbs.....	.25

WOOD CHOPPERS' WEDGES

NARROW FALLING WEDGES
Lake Superior Pattern — Per Pound
No 1000—Weights 5, 5½, 6, 6½, 7, 7½ and 8 Lbs..... $0 36



OREGON PATTERN SPLITTING — Per Pound
No. 990—Weights 4, 5, 6, 7 and 8 Lbs.$0.36

SAW WEDGES OR FOLLOWERS

Extra Quality Steel, Oil Finish — Per Pound
No. 13—Weights 1, 1½, 2, 2½, 3 Lbs....$0 30

HAMMER AND AXE WEDGES

Full Size

Half Size

Half Size

Made of Best Open Air Malleable Iron; Holds the Head securely to the Handle

No. 1747—For Hammers and Hatchets, 1⅛ in. Top 1 in. Bit — Per Gross $2 00
Three Dozen in a Box, Wt. 4½ Lbs. per Gross

No. 1742 For Axes; 3 in Top, 2¾ in Bit — Per Gross $2 60
One Dozen in a Box, Wt. 12 Lbs. per Gross

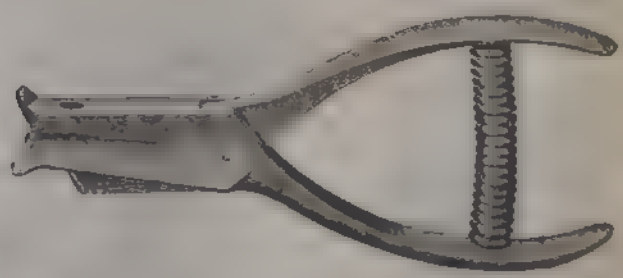
No. 1741—For Axes, Screws not included, Use ¾ x No 12 3¼ in. Top, 2½ in. Bit — Per Gross $3 60
One Dozen in a Box; Wt. 13 Lbs. per Gross

CONDUCTORS' PUNCHES

No. 210—Length 5 in.; Cast Steel, Nickel Plate, Tempered Steel Spring, Depth of Slot 1¼ in., 12 Assorted Punches. Per Dozen $13.00

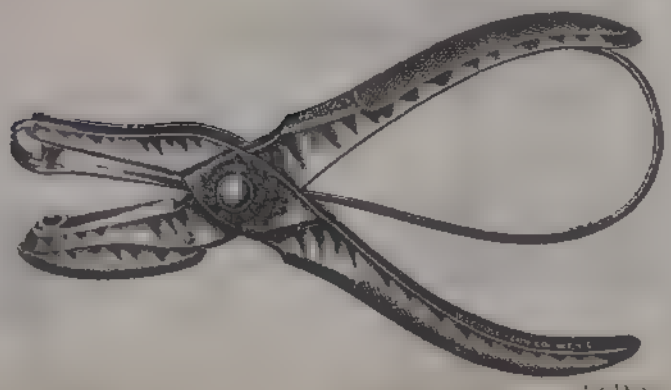
One Dozen in a Box; Weight 3¼ Lbs. per Dozen

No. 240 Length 4½ in., made of Best Quality Steel, Nickel Plated, Tempered Steel Spring, Depth of Slot 1¼ in., Assorted Punches and Dies... Per Dozen $12.00



No. 240 Length 4½ in., made of Best Quality Steel, Nickel Plated, Tempered Steel Spring, Depth of Slot 1¼ in., Assorted Punches... Per Dozen $3.00

Half Dozen in a Box; Weight 3 Lbs. per Dozen



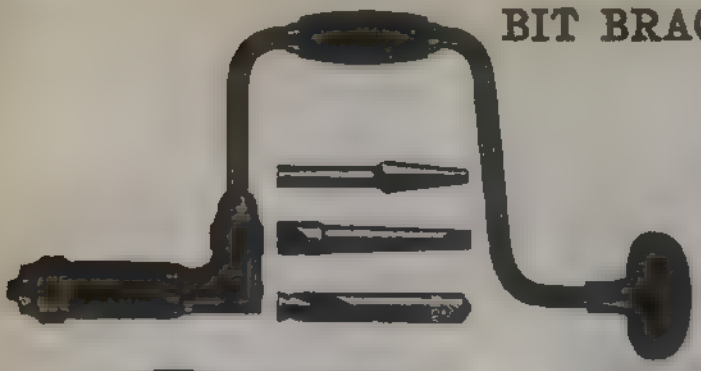
No. 260 Length 5 in.; all Steel, Full Nickel Plated, Knurled Jaw, Tempered Steel Spring, Depth of Slot 1¼ in., Reservoir in Head to catch Clippings. Especially adapted for Parties Assorted Punches and Dies... Per Dozen $8.00

Half Dozen in a Box, Weight 3 Lbs. per Dozen

No. 250 [illegible] Length 5 in., One Piece Knurled Handle, Tempered Steel Spring, Depth of Slot 1¼ in., Assorted Punches and Dies... Per Dozen [illegible]

Half Dozen in a Box, Weight 3¼ Lbs. per Dozen

BIT BRACES



ZENITH, RATCHET

Ball Bearing Chuck consists of Socket Sleeve, Binder, Ball Retaining Ring and Case Hardened Alligator Pattern Toothed Jaws that will hold round, taper or square shank bits. Jaws are 2⅛ in. long and are held in place by a steel spring. Ratchet is covered with Nickel Plated Shield High Grade Bent Steel Shank with Ball Bearing Ebony Head and Handle. Head mounted on Nickel Plated Steel Cap.

	Per Dozen
No. Z10—10 In. Sweep; Weight 36 Lbs. per Dozen.	$60.00
No. Z12—12 in. Sweep, Weight 38 Lbs. per Dozen	66.00
No. Z14—14 In. Sweep; Weight 40 Lbs. per Dozen	72 00

MARSWELLS RATCHET

A Brace for General Use. Has a Two-Piece, Self-Centering, Forged Steel, Spring Tempered Jaw Dust Proof, Ball Bearing, Steel Clad Head; **Steel Sweep, Cocobolo Head and Handle; Positive Ratchet; Nickel** Plated; Holds Auger Bits or Round Shank Drills

	Per Dozen
No. M10—10 In. Sweep, Weight 38 Lbs. per Dozen.	$45 00
No. M12—12 in. Sweep; Weight 41 Lbs. per Dozen.	48 00
No. M14—14 In. Sweep, Weight 44 Lbs. per Dozen.	51.50

One Quarter Dozen in a Box

HARTFORD, RATCHET

Steel Sweep and Thimble Nickel Plated Long Sleeve Solid Steel Alligator Jaws Ebonized Head and Handle, Head is Steel Clad to prevent Splitting.

	Per Dozen.
No. H 6— 6 in Sweep, Weight 25 Lbs Dozen.	$23 00
No H 8— 8 in Sweep Weight 27 Lbs Dozen.	24 00
No H10—10 in Sweep Weight 28 Lbs Dozen.	27 00
No H12—12 in Sweep, Weigh 30 Lbs Dozen.	30 00
No. H14—14 in. Sweep, Weight 34 Lbs Dozen	33 00

Half Dozen in a Box

STANLEY, RATCHET

The Ratchet is of the Clutch Type and the Tool has no projections to injure the hands. The working mechanism is protected from dirt and moisture and, as the Lubricating Oil is retained for a long time, the brace will not rust nor wear out in the bearings. Full Nickel Plated, **has Cocobolo, Ball Bearing Steel Clad Head, Cocobolo Handle; Ad**justable Handle Collars, Spindle and Chuck Body of One Piece of Steel; Hardened steel Jaws of Alligator Pattern. Holds Round Shank Drills and Regular Bits of All Sizes

	Per Dozen
No. 910—10 in. Sweep, Weight 36 Lbs. Dozen.	$50 00
No. 912—12 in. Sweep, Weight 40 Lbs. Dozen	55 00
No. 914—14 in. Sweep; Weight 42 Lbs. Dozen.	60 00
Extra Jaws, Two Piece, for any of Above Braces.	6 00

One-Sixth Dozen in a Box

SAMSON, RATCHET

Designed for Extra Heavy Work by Bridge, Car and Ship Builders, Plumbers, Electricians, etc. **Has Samson Ball Bearing Chuck, Dust** Proof, Ball Bearing, Lignum Vitae, Steel Clad Head, Forged Steel **Alligator Jaws; Steel Sweep, Cocobolo Handle; Improved Ratchet Pawls** act direct on the Socket Post. The Chuck is the strongest gripping device **ever put on a Brace. Takes Round or Square Shank Drills, Expansive** and Common Bits

	Per Dozen
No. 3010—10 in. Sweep; Weight 41 Lbs. Dozen.	$55 75
No 3012 12 in Sweep Weight 44 Lbs Dozen.	59 00
No 3014—14 in Sweep, Weight 47 Lbs. Dozen	62 25

Half Dozen in a Varnished Wood Case with Brass Hinges and Fastenings

	Per Pair
Extra Jaws for Samson Braces	$0 50
	Each
Extra Ratchet Dogs or Catches, for Samson Braces	$0 20

STEEL CLAD RATCHET

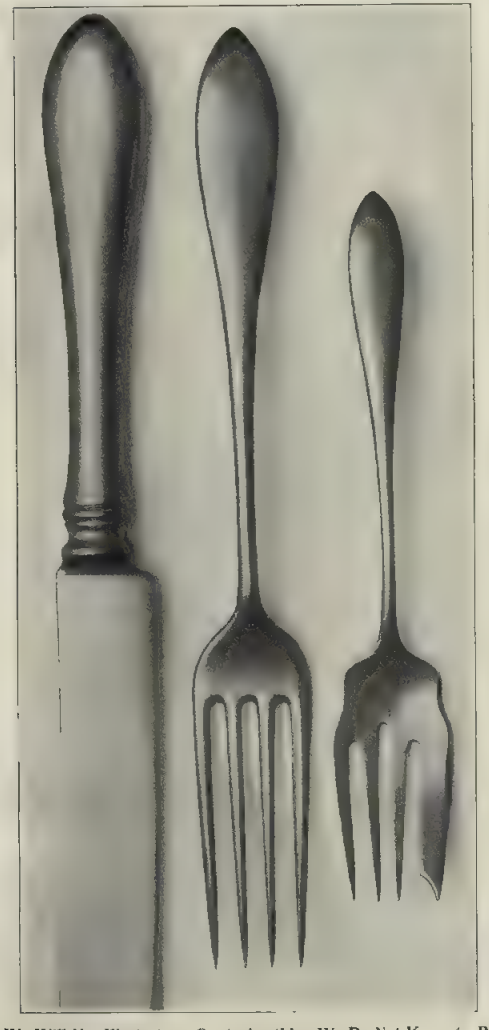
Heavy Steel Sweep, Nickel Plated; Long Sleeve, Drop Forged Jaws fastened by Steel Rivet connected by a Tempered Steel Spring, Cocobolo Head, Rosewood Handle, Long Steel Quill, with self-lubricating bring, firmly fastened to Head.

	Per Dozen
No. 510—10 in. Sweep; Weight 28 Lbs. per Dozen.	$20 00
No. 512—12 in. Sweep; Weight 30 Lbs. per Dozen.	22 00
No. 514—14 in. Sweep; Weight 34 Lbs. per Dozen	24 00

Half Dozen in a Box

Sterling Silver Table Ware

Puritan Pattern, Bright Finish. Illustrations Are Exact Size



Puritan Pattern

Bright Finish

		Prices, Per dozen.
6357	Tea Spoons, Light	$21 25
6358	Tea Spoons Medium	27 00
6359	Tea Spoons, Heavy	32 00
6360	Dessert Spoons, Medium	37 50
6361	Table Spoons, Medium	53 50
6362	Soup Spoons	44 00
6363	Dessert Forks, Medium	37 50
*6364	Table Forks, Medium	53 50
6365	Dessert Knives	52 50
*6366	Medium Knives	50 50
6367	Bouillon Spoons	29 50
6368	Butter Spreaders	37 75
6369	Coffee Spoons, Plain Bowl	15 75
6370	Coffee Spoons, Gilt Bowl	19 25
6371	Orange Spoons	29 50
6372	Oyster Forks	30 00
*6373	Salad Forks, Individual	37 75

Single Prices

Forks

		Prices, Each.
6374	Cold Meat Fork, Plain Tines	$ 7 00
6375	Cold Meat Fork, Gilt Tines	8 00
6376	Salad Fork, Serving, Plain Tines	12 25

Ladles

		Each
6377	Cream Ladle, Plain Bowl	$ 3 85
6378	Gravy Ladle, Plain Bowl	10 00

Spoons

		Prices, Each.
6379	Berry Spoon, Plain Bowl	$ 13 00
6380	Berry Spoon, Gilt Bowl	14 35
6381	Olive Spoon, Plain Bowl	2 80
6382	Preserve Spoon, Plain Bowl	6 50
6383	Salad Spoon, Serving, Plain Bowl	11 40
6384	Sugar Spoon, Plain Bowl	3 35
6385	Sugar Spoon, Gilt Bowl	3 85

Miscellaneous

		Each.
6386	Bon Bon Scoop, Plain Bowl	$ 3 15
6387	Bon Bon Scoop, Gilt Bowl	3 50
6388	Butter Knife	5 25
6389	Pie Server	7 00
6390	Sugar Tongs	4 55

*Articles Illustrated.

We will gladly quote prices on any articles in this pattern not listed.

Let us quote you on Mahogany or Oak chests of Sterling Silver Table Ware in this Pattern in combinations of 29 to 222 pieces.

We Will Not Illustrate or Quote Anything We Do Not Know to Be Reliable. We Want No Dissatisfied Customers.

The sizes of the cups are 6, 8, 10, 12, 16, 20, 24 and 30 to the quart, size 30 having been added to the line for filling edible cones, which are being served on trains, at theaters, summer resorts, fairs, church picnics, at soda fountains, etc.

The company issues an attractive booklet, illustrating a great variety of accessories for the ice cream and soda fountain trade, which will be furnished on request

Montauk Toilet Bottles with Glass Labels, and Montauk Racks

Neidlinger Bros., 83 Murray street, New York, have put on the market a line of Montauk toilet and bath set bottles with glass labels. The bottles are glass, rounded square in shape, with a recess holding a glass label, white with black letters and a gold border edged in black. Most of the label names are kept in stock but if some unusual name is wanted the label can be furnished in ten days.

The Montauk racks for toilet bottles are made of solid brass, heavily nickeled and are in two sizes. The No. 10 has four 4-oz. bottles, labeled alcohol, witch hazel, ammonia and peroxide, respectively

No. 20 has eight 4-oz. bottles labeled alcohol, witch hazel, ammonia, peroxide, face cream, bay rum, toilet water and bicarbonate of soda. All racks have nickeled screws for attachment to wall or partition or they may be placed on the wash stand

King Portable Parlor Lamp

The King Light Company, Peoria, Ill., has recently placed on the market, to be handled through the hardware trade, the King portable parlor lamp for all around use. It makes and burns its own gasoline gas, developing, it is said, 300 c.p., and burning 7 hours on 1 pint of gasoline.

King Portable Parlor Lamp Burning Gasoline

The front is 8⅝ in in diameter at the base, takes a standard 12-in. opal shade or art glass dome, and produces neither smoke nor odor, it is stated The lamp is 26 in. high and the shade may be readily removed for cleansing. The company will give the exclusive sale of the King line to but one dealer in a town

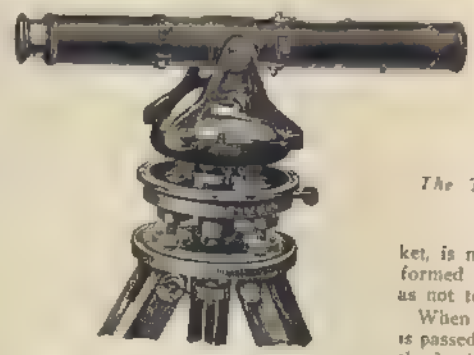
K & E Transits and Levels

The Keuffel & Esser Company, Hoboken, N. J., and 127 Fulton street, New York, is making a series of new surveying instruments which have been built for a special class of work, in accordance with the suggestions of the head of one of the leading agricultural colleges.

While primarily farm surveying instruments, the nature of their construction does not limit their use to farm surveying only, the company recommending them as thoroughly practical instruments for the use of builders, architects, contractors, constructors, landscape gardeners, road builders, etc.

The illustration shows the K & E improved farm transit, with compass No. 5694. Its leading characteristics are as follows: A 10-in. telescope with good lenses and 1-in. object glass which shows objects erect. The telescope may be tilted for plumbing lines and reading horizontal angles between points not in the same plane. The bubble in the telescope allows the instrument to be used as a level. The horizontal circle is graduated to degrees, the Vernier reads to 5 minutes, there is a 2½-in compass needle and the compass circle is graduated to degrees

The transit is furnished complete,



K & E Improved Farm Transit with Compass

with plumb-bob, 6-ft. flexible leveling rod, in wooden box with lock-hooks and metal handle and with hardwood tripod. The entire outfit is listed at $

There is also the No. 5693, practically the same instrument but without compass listing $30 complete.

In the same group are two farm levels, which, briefly described, have the following features: Sighting tube, 10 in; pinhole eyepiece, plain glass front, spirit level and crosshairs, and horizontal circle graduated to degrees. The instrument is complete, in wooden box with lock-hooks and metal handle, plumb-bob, 6-ft flexible leveling rod and hardwood tripod with directions listing $16, known as No. 5690

In the same class is the No. 5692 farm level, to which the preceding description applies, except that it has a 10-in. telescope with good lenses, object glass 1 in., which shows objects erect, listing $25

These fine, accurately made instruments are thus placed within the reach of people whose requirements are not so exacting as those of highly trained civil engineers engaged in difficult scientific work requiring the more expensive professional instruments, also made by the company. The transits and levels here described are designed particularly for laying out parks, agricultural plots, gardens, etc., for draining, ditching and road making, and are strongly and accurately built

The Thompson Adjustable Tree Support

The tree support here illustrated, which the Thompson Mfg Company, 1260-62 East Ninth street, Los Angeles, Cal., is placing upon the mar-

The Thompson Adjustable Tree Support

ket, is made of galvanized hoop steel formed into a hook and shaped so as not to injure the limb of the tree.

When installing this support the wire is passed through the hole in the hook the hook placed in position under the limb and the wire bent about the hook allowing it to pass into the slot and a turn or two taken about the wire as shown. Having secured the first hook the wire is passed through the hole in another support, the limb raised to the required position and the operation repeated.

These supports are intended to hold the tree in its natural shape while laden with fruit. Opposite limbs may be made to support each other, or the center limbs to support the outer ones; thus wooden props are eliminated

Actual demonstration is said to have proved that in districts where heavy winds prevail there is a material saving in the breakage of limbs, and a smaller percentage of fruit blown from the trees where these supports were used

The Magneto File

Made of high grade material and for the use of the automobilist, the magneto file here illustrated is being placed upon the market by Liveright Brothers of Philadelphia, Pa. The tool is made of very thin material

Improved Safety Hinge Hasp

The Griffin Mfg. Company, Erie, Pa., has recently brought out a line of Improved Safety hinge hasps, as here shown. They are now made in 3, 4½ and 6-inch sizes, and larger sizes will soon be ready for the market. It will be noted that all the screws are entirely covered when the hasp is locked.

The Improved Safety Hinge Hasp

The end is curved out, forming a good finger hold even when the hands are covered with heavy gloves. It is pointed out that these hasps have more than double the strength of the ordinary safety hasp, especially through the slot locking them practically unbreakable. They are furnished either in plain steel or any of the usual finishes.

Meiselbach Bicycles for 1912

Three new model bicycles are being offered to the hardware trade this season by the A. D. Meiselbach Bicycle Company, North Milwaukee, Wis. They are the Badger, Meiselbach and Earl.

The Earl model is a strictly high-grade machine, made of the best materials. The Meiselbach model is built to supply the demand for a good medium grade bicycle and the Badger is a cheap machine which, however, is constructed like the other two models with the most careful attention to detail.

The workmanship on the bicycles is referred to as the finest and the finish the best that can be produced. By attention to mechanical detail, the company is producing a very easy running machine, thereby greatly increasing the pleasure of the rider.

The bicycles are manufactured under the careful personal supervision of A. D. Meiselbach, who started in the bicycle business over twenty-five years ago. It is pointed out that the modern plant, equipped with the best up-to-date machinery, together with scientific management and labor-saving devices, enables the company to keep prices so low that the bicycles are proving easy sellers to merchants.

The Taintor Framing Tool

The latest candidate for popular favor in the way of a carpenters' and builders' tool designed especially for framing purposes and one which can be applied directly to the timber to be marked is the Taintor Framing Tool made by the Taintor Company, 146 Lafayette street, Newark, N. J. It is entirely of steel and so constructed that a single setting will put the various blades in position to give the perpendicular, horizontal and miter cuts and also the amount of gain per foot to the rise of the rafters. Although it is not a combination tool, yet it can be used as a square and bevel.

The tool consists of a stock or handle 1½ in. wide by 12½ in. long, to which are pivoted two blades that can be closed into the stock, the whole then occupying a space of 1½ x 13 in. It has also a spacing blade which can be extended so that any space up to 24 in. can be obtained. A link marked "Miter Blade" gives the line for the miter cut of a jack rafter against a hip or valley rafter. The under portion of the stock is plain while the upper portion is engraved with letters and figures. It also has two grooves,

The Taintor Framing Tool

one curved and the other straight, all clearly shown in the illustration.

The left-hand blade is connected with the curved groove by the "miter blade" as shown, and when the left hand blade is at right angles to the stock the miter blade is at an angle of 45 degrees to both blade and stock.

The figures 1, 2, 3, 4, etc., on the left-hand side of the curved groove indicate the rise per foot for the common rafter, the groove being so curved as to bring the miter blade into the proper position to cut the miter upon a jack or cripple rafter to fit against the hip or valley rafter for the pitch at which it is set.

The figures in the line under the word "Gain" give the gain per foot of the common rafter for the amount of rise. The figures under the word "Hip Rafter" at the right of the curved groove give the same results for the hip rafter. The right-hand blade is connected with the short groove by a link curved so that the tool may be applied directly to the hip rafter to obtain the backing. The screw at the top of the left-hand blade will secure the two blades at right angles to each other, when the tool can then be used as a steel square.

The tool, which weighs 21 oz., is to the carpenter and builder what the slide rule is to the engineer and the adding machine to the accountant. Full directions for using the tool, which is in no way a complicated affair, are contained in a pamphlet illustrating and describing the device.

Walker's Swinging Blade Ice Cream Disher

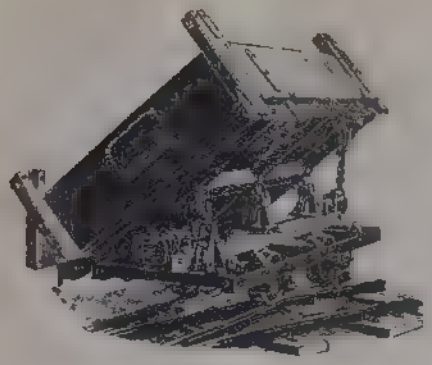
The Erie Specialty Company, Erie, Pa., has brought out the Walker quick and easy swinging blade ice cream disher, an addition to a large line of ice cream dishers in cone and bowl shape. This latest type of disher or spoon is in bowl form, and provided with a knife or scraper that revolves from one side of the cup to the other to cut out the cream.

Although this particular way of releasing cream from a cup is not new, the method used for retaining the blade in the cup is different. The bearing ends of the blade are so formed that they cannot spring out of the bearings when in use, thus preventing the breaking of blades. Heretofore this has happened when the outer end of the blade was forced from its bearing by the great torsional strain in removing the cream, which often twists the blade from the operating rod; putting the disher out of action often during a rush of business.

Attention is directed to the location of the operating parts, which are near the handle and as far removed from the cup as possible. The illustration shows the disher blade in operative position. A well-shaped wood handle, securely mounted, provides an easy form grip, thus preventing the tendency to twist or slip in the hand when dishing out hard cream. The metals used are said to be of high grade, the cups being formed from sheet stock of suitable thickness for hard usage.

Walker's Quick and Easy Swinging Blade Ice Cream Disher No. 380

HAND AND DUMP CARS



CONTRACTORS' CARS

Each

No. 4—24 in. Gauge, Steel Frame, Capacity about 32 Cubic Feet; Height above Track 3 ft., 6 in., 12 in. Chilled Wheels; Bronze Bearings; Improved Journal Boxes; all Wood is White Oak; Dumps on either Side. $100 00

Weight about 1500 Lbs. Each

Sizes, can be furnished. Prices upon Application.

KALAMAZOO SECTION HAND CARS

Standard Gauge — Each

No. [illegible]—Size of Platform 6x4½ Feet. Improved Pressed Steel Wheels, Diam. 20 in., Diam. of Axles 1⅝ in. with 3 in. Bearings; Machine Cut Gears, Flexible Steady Box; Double Acting Brake, Wrought Walking Beam, Extra Strong Gallows—Frame with Vertical and Diagonal Bracing; Bed Frame is made of Dry White Ash, Gained and Thoroughly Bolted together; Braced Diagonally and Trussed with Longitudinal and Transverse Wrought Iron Rods against Sagging, etc.; the Wheels have twice the Thickness of Metal, at Throat of Flange and the Flange, than in the Tread, giving Double Wearing Qualities. $50 00

Weight 510 Lbs. Each

HAND CARS AND VELOCIPEDES

PUSH CARS

For Ordinary Section Purposes, such as Carrying Ties, Dirt, Rails, Etc.

Each

No. 16 [illegible] Platform 7x5¾ Feet. Improved Pressed Steel Wheels, Diam. 20 in., Diam. of Axles 1½ in., Brass Bearings, Frame and Platform of Seasoned Hardwood, Ends Strapped with 2x½ in. Iron Painted Brown. $50.00

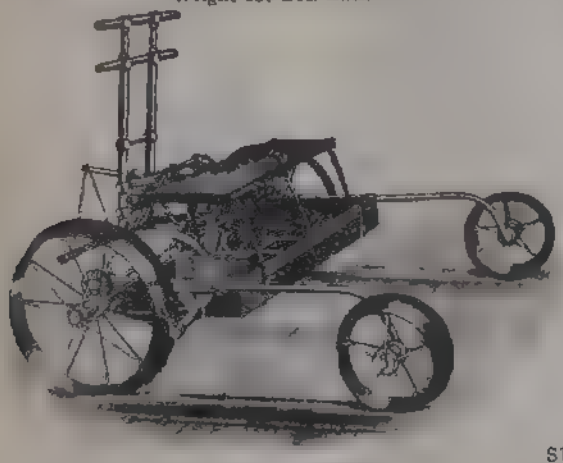
Weight 480 Lbs. Each

RAIL CARS

For use of Track Layers — Each

No. 8½ [illegible] Platform 8x5 Feet, Capacity 12 Tons, Sills covered by 3x⅛ in. Iron Double Flanged Wheels 10 in. Diam. of Axles 2½ in. Outside Bearings and Brasses. Two Rollers at Each End Facilitate Handling Rails. Has Malleable Hook at Each Corner for Hauling, also a Heavy Ring in the Center of Each Side for Lifting with a Derrick $60.00

Weight 1450 Lbs. Each



STANDARD GAUGE

For Use of Lamp Lighters, Switch Tenders and for General Track Purposes. Fitted with Tray for carrying Packages, Tools, Lamps, etc.

4-WHEEL VELOCIPEDES

A Four Wheeled Machine is much safer than a Three Wheeled on Curves and on Wet or Frosty Rails, and runs easier. — Each

No. 7—Built to any Gauge; Geared 3⅛ to 1; Suspension Spoke Wheels, Diam. 20 in.; Axles operate under Anti-Friction Roller Bearings; Entire Frame Machine Cut Teeth throughout with Reliable Brake; will Carry Two Persons; operated by either one or two Passengers $60 00

Weight 195 Lbs. Each

3-WHEEL VELOCIPEDES

Each

No. 12—Built to any Gauge; Wooden Frame; Wood Filled Wheels 20, 17 and 14 in. Diam.; Highest Grade Ball Bearings, Arm Adjustable to Different Gauges, Supplied when so Ordered $40 00

Weight 150 Lbs. Each

Note—[illegible] Wheel Velocipedes can be furnished if desired, at slightly higher price

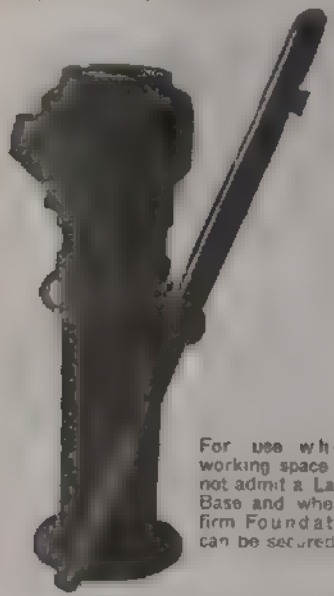
All Above, sold for Factory Shipment

HYDRAULIC JACKS

DUFF-BETHLEHEM

Made up of Two Cylinders, one sliding within the other

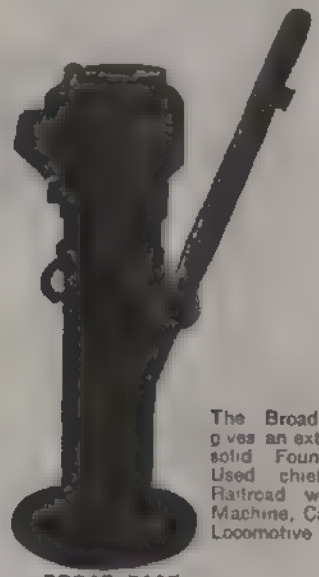
Both Cylinder and Ram made of Open Hearth, Fluid Compressed Steel, assuring Lightness and Strength. Can be operated to full extension of Any Position. Due to special construction and location of valves, a Weight of 150 Lbs. at the end of the Operating Lever balances the Rated Lift of the Jack, so one man can operate the Jack Ready to its normal capacity, Will Stand a greater Overload than any other Hydraulic Jack, will not Leak, nor "Creep" under Load.



For use where working space will not admit a Larger Base and where a firm Foundation can be secured

PLAIN

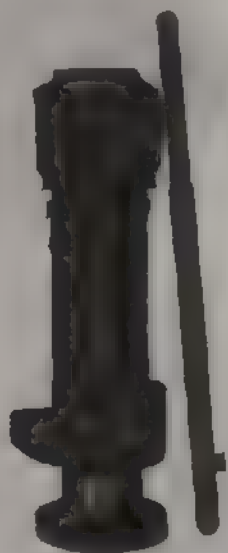
Nos.	Tons Lift	Extends In.	Ht. Closed In.	Wt. Lbs.	Each
A	10	12	22	70	$ 65.00
AA	10	18	28	78	75 00
B	15	12	22½	80	82 00
BB	15	18	28½	90	94 00
C	20	12	23	94	100.00
CC	20	18	29	110	118 00
DD	30	12	24	110	140 00
DDD	30	18	30	125	165 00
E	40	12	24½	110	155 00
EE	40	18	30½	135	186 00



The Broad Base gives an extremely solid Foundation; Used chiefly for Railroad work in Machine, Car, and Locomotive Shops.

BROAD BASE

Nos.	Tons Lift	Extends In.	Ht. In.	Base In.	Wt. Lbs.	Each
H	10	12	22	11	80	$ 78.00
HH	10	18	28	11	90	90.00
J	15	12	22½	11	100	100 00
JJ	15	18	28½	11	114	120 00
KK	20	12	23	12	114	120 00
KKK	20	18	29	12	128	140 00
LL	30	12	24	12	135	150 00
LLL	30	18	30	12	150	175 00
MM	40	12	24¼	12	141	180 00
MMM	40	18	30½	12	160	220.00



Used in Machine Shops and for any condition where there is not sufficient room to get the head of the Jack underneath the Load; Drop Forged Claw or Toe Piece.

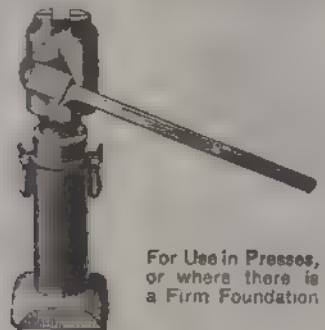
FIXED CLAW

Nos.	Tons Lift	Extends In.	Ht. In.	Base In.	Wt. Lbs.	Each
BX	15	12	23	9	105	$125 00
BBX	15	18	29	9	132	140 00
CCX	20	12	23	10	130	155 00
CXX	20	18	29	10	160	185 00
DDX	30	12	24	10	210	210 00
DXX	30	18	30	10	230	245 00
EX	40	12	24	10½	247	260 00
EEX	40	18	30	10½	250	280.00

DUDGEON

Made of Two Cylinders, one sliding within the other

To the inner one, which is termed the Ram, is attached the Head, having a Socket to receive the Lever which operates the Force Pump in the lower end of the Ram, the remaining space is the Reservoir containing the fluid which when forced into the lower chamber, causes the Ram to rise, and the lower when allowed to return through the lower valve and back passages by operation of the same lever. It is Light, Portable and Works Easily, Operated by one man, Lifts 10 Tons 1 ft. in 1½ minutes. Liquid used is One Part Alcohol and Two Parts Water, Non-freezing. 1 Ton Load Applied to Pump Piston will cause Ram to exert upward Statical Force of 16 Tons.



For Use in Presses, or where there is a Firm Foundation

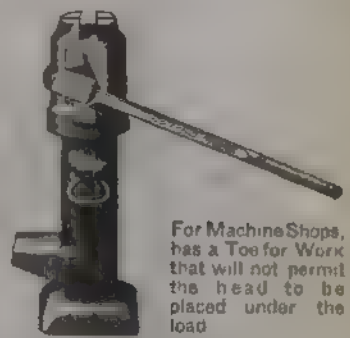
PLAIN

Nos.	Tons Lift	Extends In.	Ht. In.	Base In.	Wt. Lbs.	Each
8	8	12	25	6	80	$ 80.00
9	8	18	32	6	98	95.00
5	5	12	26	6½	102	100.00
10	15	18	32	6½	120	125.00
12	15	12	26	7	127	120 00
13	20	18	33	7	155	145.00
15	30	12	26	8	194	175 00
17	30	18	33	8	260	210.00
19	40	12	27	9	280	210.00
20	40	18	34	9	320	250.00

For Railroad Work or where a Broad Base is required

BROAD BASE JACK

Nos.	Tons Lift	Extends In.	Ht. In.	Base In.	Wt. Lbs.	Each
32	10	12	25	11	109	$ 95.00
33	10	18	31	11	125	110.00
36	15	12	25	12	135	125.00
37	15	18	32	12	158	150.00
39	20	12	26	13	169	150 00
40	20	18	33	13	198	175.00
44	30	12	26	14	259	200 00
45	30	18	33	14	300	235.00
47	40	12	27	14½	320	240.00
48	40	18	33	14½	360	280.00



For Machine Shops, has a Toe for Work that will not permit the head to be placed under the load

CLAW OR GROUND LIFT

Nos.	Tons Lift	Extends In.	Ht. In.	Base In.	Wt. Lbs.	Each
61	10	12	25	6	123	$100.00
62	10	18	32	6	144	120.00
64	15	12	26	6½	152	150 00
66	15	18	32	6½	180	185.00
66	20	12	26	7	207	200.00
67	20	18	33	7	245	240.00
69	30	12	26	8	310	250.00

30 and 40 Ton Sizes of Plain and Claw Jacks have Round Base; Other Sizes have Square Base

All Above, Open Stock

TUBULAR LANTERNS

Made of Extra Heavy Material, with Best Workmanship and Fine Finish.

The Reinforced Ribbed Tubes give Extra Strength.

The Reinforced Top Rim prevents Lantern from being broken or twisted out of shape.

The Extra Inside Cage which carries the Spring that operates the Raising and Lowering Device prevents the Spring if broken, from breaking through.

The Lock Bail allows the Lantern to be held by Base when the user wishes to hang it on rafters, high hooks, etc. The Improved Raising and Lowering Device cannot be knocked out of place.

MARSWELLS

The Extra Offset upon which the Burner Locks and which reinforces the Tubes, prevents them from being bent out of shape and resists the rocking back and forth of the Tubes from the Main Body of the Lantern.

The Large Fount is beveled on the Edges and concave on the Bottom preventing the Lantern's going out when jarred roughly.

The Large Filler enables the user to fill the Lantern without removing his gloves in cold weather.

The Lock Burner is made of Heavy Brass and is perfect fitting. The Air Holes are arranged to regulate the flame so that there can be no smutting of the Globe.

No. 2 Burner No. 0 Cold Blast Globe, 1 in. Wick, 15 in. High, Fount holds 1¾ Pints, Burns 24 Hours

	Per Dozen
No. 2—Tin Fount	$13 00
No. 2C—Copper Bottom Fount	$17 00
No. 2CF—Copper Fount	$17 50
No. 32—Extra Large Tin Fount; Capacity 1 Quart, Burns 40 Hours	15 00

Half Dozen in a Case; Weight 70 Lbs. per Dozen

MARSWELLS

Side Crank Lift, Wire Guard and Lock Bright Tin, Hot Blast

	Per Dozen
No. 02—No. 2 Burner, No. 0 Globe, 1 in Wick; Height 13¾ in.; Fount Holds 1¾ Pints; will burn 19 Hours	$13 00

One Dozen in Case; Wt. 40 Lbs. Doz.

	Per Dozen
No. 0—No. 1 Burner, No. 0 Globe, ⅝ in Wick; Height 14 in.; Holds Pint, Burns 17 Hours.	$9 50

One Doz. in Case, Wt. 35 Lbs. Doz.

MIDGET

A perfect, Inside Lift, Cold Blast Lantern of small size; No. 1 Burner, ⅝ in. Wick; Selected Globe; Height 12 in.; Extra Heavy Bottom, Seamed to Fount, Every Lantern Tested; will give as much light as the ordinary lantern of a larger size; Absolutely Windproof.

	Per Dozen
No. MT—All Tin	$10 00
No. MB—All Brass	19 00

Half Dozen in Case, Wt. 35 Lbs. Doz.

CAR INSPECTOR'S LANTERNS

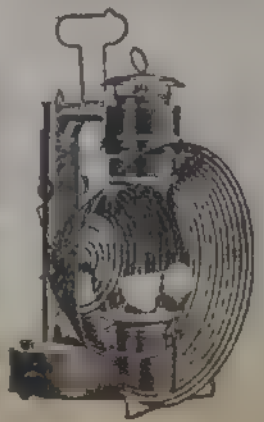
MARSWELLS

These Lanterns are fast replacing the old Oil Torch and coming into use on the principal railroads. Reflects 7 Candle Power; Fitted with Rigid Handle and Hand Grip for Easy Manipulation. Wick can be regulated from Outside of Globe without removing Globe.

	Per Dozen
No. OC1—No. 1 High Cone Burner; ⅝ in Wick; No. 0 Tubular White Globe; 14 in. High; 5 in Silvered Glass Reflector; will burn 20 Hours with one filling, Bright Tin	$23 00

One Half Dozen in a Case
Weight 66 Lbs. per Dozen

SEARCHLIGHTS



COLD BLAST

Bright Tin Reflector; Used in Livery Stables, Mills, Warehouses, Lawns and as Car Inspectors'. Throws a Brilliant Light; Lighted, etc., without removing Globe, Cannot be Blown Out.

	Per Dozen
No. 20—No. 2 Burner; 1 in. Wick, No. 0 Cold Blast Globe with Bull's Eye in Globe, 12 in. Reflector 7 in. Deep, 14½ in. High, Holds Pint and will Burn 25 Hours with One Filling, Blue Japanned	$30 00

Half Dozen in Case, Wt. 100 Lbs. per Dozen

	Per Dozen
No. 40—No. 9 Burner; 1½ in. Wick, No. 2 Plain Street Lamp Globe, 16 in. Reflector, 20½ in. High, Holds 4½ Pints and will Burn 30 Hours at One Filling, Green Japanned Tin.	72 00

One in a Box; Weight 24 Lbs. Each

MARSWELLS COLD BLAST LANTERN ASSORTMENTS

Bright Blue Fount and Frame
Retail Value $1 00 Each
Two in Each Assortment

Bright Green Enameled Fount and Frame
Retail Price $1 00 Each
Two in Each Assortment

Nickel Plated Fount, Bright Yellow Frame
Retail Price $2 00 Each
Two in Each Assortment

Copper Fount, Bright Red Frame
Retail Price $1 50 Each
One in Each Assortment

A Lantern Display that will add Tone and Variety to any line and put New Life into the Lantern Business

MARSWELLS

Total Retail Value..... $17.00

Per Asst. of 12

Asst. No. 1—One Dozen No. 2 Cold Blast Wind Proof Tubular and Dash Lanterns of the most approved Designs, Brightly Enameled in Red, Blue, Yellow and Green, Complete with C. B. Globe, No. 2 Burner and 1 inch Wick..... $17 00

Each Assortment in a Case
Weight 51 Lbs. per Assortment
We do not break Assortments

Each Lantern is made on the Marswells Cold Blast Principle, Extra Heavy Vase with Reinforced Tubes and Top Rim, Improved Raising and Lowering Device Inside the Frame; Embossed Tubes; Standard Size Fount, Extra large Filler Cap, Broad Recessed Base.

The Dash Lanterns have Bull's Eye Lens and Improved Dash Attachments.

The Dome is so constructed that rain or snow cannot enter Globe, the Bail locks in an upright position; the Burner is arranged for perfect combustion to give the highest, broadest, lightest and brightest flame.

A Marswells Lantern will not shake out and cannot be blown out by gust or gale.

An Assortment of these attractive Lanterns will add much to the appearance of any Stock and will greatly help to increase sales.

Copper Fount, Bright Green Frame
Retail Value $1 50 Each
One in Each Assortment

Dash, Bright Green Enameled
Retail Value $1 50 Each
One in Each Assortment

Dash, Bright Red Enameled
Retail Value $1 50 Each
One in Each Assortment

RAILROAD SUPPLIES

PAULUS—VERTICAL TRACK DRILLS

The Operator stands erect, getting greater power and less strain; Drill requires no adjustment, always ready for use; can be instantly thrown back out of the way of passing trains; Automatic Feed permits drilling of heaviest rail without stopping; May be used on Angle Bars, Steel Girders, Etc., as well.

Each

No. 25—Malleable Iron Frame; Height 33 in.; Width 9¼ in.; Width at Foot Plate 22 in.; Length of Handles 11 in.; Takes 41-64 in. Round Shank Drills from ¼ to 1⅛ in. Diam., Shown on page 644; Wt. 66 Lbs. Each $25 00

WITH RICH SPINDLE AND CHUCK

No. 33—Paulus Drill as described above, fitted with Rich Spindle and Chuck, Wt. 70 Lbs. $33 00

BELAND HORIZONTAL

A Thoroughly Reliable Hand Feed Drill, completely meeting all requirements of a Light and Serviceable Tool for drilling all holes for a joint without removing the clamp; Frame fastens under the rail.

Each

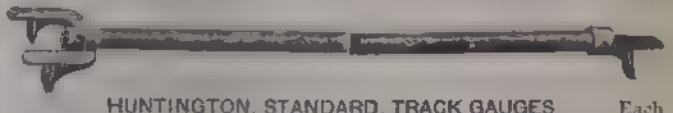
No. 75—Length of Frame 23 in.; Offset from rail 8 in.; Length of Lever 21 in. Wrought Iron Frame, Cast Steel Ratchet with Wood Handle; Takes Ratchet Square Taper Shank Drill shown on page 647, Wt. 26 Lbs. Each $7 50

ADJUSTABLE SPIRIT TRACK LEVELS

Each

No. 500—Made of White Pine 1¼x5½ in., 6½ ft. long with Steel Plate. Spirit Glass is set in top and protected by Brass Cap. One end is cut in steps and used to obtain proper Elevation at curves. $5.00

Weight 9 Lbs. Each



HUNTINGTON, STANDARD, TRACK GAUGES

Each

No. 200—Gas Pipe Stem, Length 5 ft., over all. Taper Threaded at Both Ends, to which Malleable Iron Prongs are Screwed and Pinned through to Form Two Lugs at Forked End, Bearing the Flange Edges on Rail, Secure at once a True Right Angle. The Frequent Inaccuracies at Frogs, Curves and Switches due to the use of Ordinary Gauges are obviated ..$2 00

Weight 12 Lbs. Each

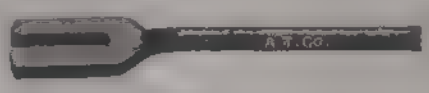
TRACK WRENCHES

Solid Steel, Oil Finish, Length 24 in.; Track Bolts.

Per Pound

No. 1 For ⅞ in. Nuts; 1¼ in. Opening $0 25
No. 2 For ⅞ in. Nuts, 1⅛ in. Opening .25
No. 3 For ⅞ in. Nuts, 1½ in. Opening .25
No. 4 For 1 in. Nuts, 1⅝ in. Opening .25

Weight 4 to 6½ Lbs. Each



RAIL FORKS

Solid Steel, Oil Finish, For moving Rails Laterally

Per Pound

No. 5—Length 32 in. Slot 6x¾ in. $0 25

Weight 15 Lbs. Each

RAIL TONGS

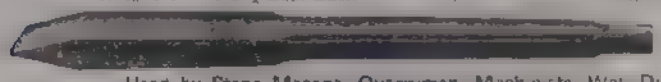
Drop Forged, Solid Steel, Oil Finish

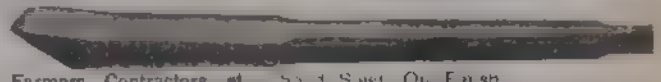
For Carrying Rails of all Sizes and Beams

Per Pound

No. 6 Length 12 in., Drop 13 in. $0 30

Weight 16 Lbs. Each





Used by Stone Masons, Quarrymen, Machinists, Well Diggers, Farmers, Contractors, etc. Solid Steel, Oil Finish

No. 12W—WEDGE POINT, CROW BARS

Weight, Lbs.	10	12	14	16	18	20	22	24
Size in Square, In.	1	1⅛	1⅛	1¼	1¼	1¼	1⅜	1⅜
Length, Ft.	4	4⅛	4⅛	4⅜	5	5⅛	5⅛	5⅛

Per Pound, All Sizes $0 12

No. 12P—PINCH POINT, CROW BARS

Weight, Lbs.	10	12	14	16	18	20	22	24
Size in Square, In.	1	1⅛	1⅛	1¼	1¼	1¼	1⅜	1⅜
Length, Ft.	4	4⅛	4⅛	4⅜	5	5⅛	5⅛	5⅛

Per Pound, All Sizes $0.12

RAILROAD LINING BARS

Used by Track and Section Men for Lining up and Prying Rails into Position

Per Pound

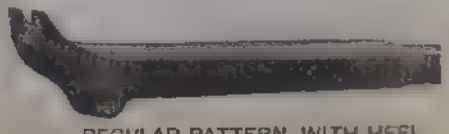
No. 12L—Weights 20 to 30 Lbs.; Solid Steel, Oil Finish $0 12

RAILROAD TAMPING BARS

Used in Track Laying and for Driving Ballast firmly under Ties

Per Pound

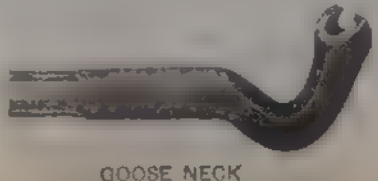
No. 16T—Weights 14 to 18 Lbs.; Solid Steel, Oil Finish $0.16



REGULAR PATTERN, WITH HEEL

RAILROAD CLAW BARS

Solid Steel; Oil Finish; For Drawing Spikes from Ties, etc., also used for tearing down old buildings, etc.



GOOSE NECK

Per Pound

No. 16R—Assorted Weights 20 to 30 Lbs. .....

Per Pound

No. 22—Assorted Weights 35 to 26 Lbs. $0 22

All Above, Open Stock

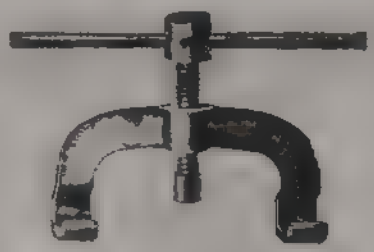
RAIL BENDERS OR STRAIGHTENERS

USED BY RAILROADS, STREET CAR LINES, IN SHOPS, ETC.

ECCENTRIC

Bends or Straightens Rails, Girders, Bars, etc., on Level Ground or Graded Track; Wrought Iron Frame, Gas Pipe Lever.

	Each
No. 11—For 16 to 25 Lb. Rail; Weight 85 Lbs. Each	$ 50.00
No. 12—For 25 to 45 Lb. Rail; Weight 140 Lbs. Each	75 00
No. 13—For 45 to 65 Lb. Rail; Weight 190 Lbs. Each	90.00
No. 14—For 65 to 85 Lb. Rail; Weight 300 Lbs. Each	100.00
No. 15—For 85 to 100 Lb. Rail; Weight 350 Lbs. Each	125.00



JIM CROW, HEAVY PATTERN

Best Wrought Iron, with Machine Cut, Square Thread, Steel Screw with Bar, for Light Work.

Nos.	For Rail, Lbs.	Diam. Screw, In.	Span In.	Weight Each, Lbs.	Each
10	12 to 25	2	19	87	$25.00
20	25 to 45	2¼	22	98	30.00
30	40 to 60	2½	28	145	35.00

EMERSON PATENT TEE

Valuable for Bending Rails as well as for taking kinks out of Rails already laid; operated by a loosely fitting Lever, 8 to 9 ft. Long. Can be used on any level ground where a rail can lie. Made of Wrought Iron and Wrought Steel. All parts are Interchangeable. An excellent Portable Tool for Bending Tee Rails.

	Each
No. 1—For Tee Rails, up to 45 Lbs.	$150.00
No. 2—For Tee Rails, 45 to 65 Lbs.	175.00
No. 3—For Tee Rails, 65 to 90 Lbs.	215.00
No. 4—For Tee Rails, 90 to 115 Lbs.	265.00

Weights 220, 275, 375 and 520 Lbs. Each

EMERSON PATENT UNIVERSAL

This Machine is especially designed for the Yard or Terminal Use, and will be found very valuable for taking out surface bends and any other irregularities in Rails; made of Wrought Iron and Wrought Steel; the Sled Frame is readily moved to any desired place; all Parts are Interchangeable.

	Each
No. 5—Emerson Universal, complete with Frame and Rollers, ready for Surface Bending	$300.00

Weight 560 Lbs. Each

All Above, Open Stock

Don't put dynamite into hot water, nor allow it to come in contact with steam.

Don't leave dynamite exposed to the direct rays of the sun.

Don't stand dynamite in front of or near a fire.

Don't put dynamite in, over, or close to a stove or steam boiler.

Don't thaw dynamite on a hot stove or shovel.

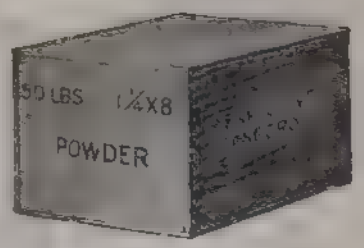
Don't put dynamite on shelves or on anything else directly over steam or hot water pipes or other heated metal surfaces.

Don't heat thawing house with pipes containing live steam.

Don't keep any blasting caps or electric exploders in thawing house.

Don't take dynamite in or near a blacksmith shop, or near a forge on open work.

DYNAMITE



Dynamite freezes at a temperature between 45° and 50° F., and should not be used in a frozen or chilled condition. Thaw by placing in a can and setting can in pail of warm water. Never put it in oven.

We recommend 20, 30 and 40 per cent for stumps, general logging, copper and iron mining, underground or open pit work, ice breaking, etc., 40 to 60 per cent for frozen earth and submarine work, 60 per cent for excavating rock and churn or diamond drill operations.

Dynamite cannot be shipped with other goods and is only accepted on certain days by Railroads.

RED CROSS EXTRA

Low Freezing Ammonia; Half Pound Sticks

Cartridges are 1¼x8 in.

Strength, per cent.	20	30	40	50	60
Per Pound	$0 20	25	.30	35	.40

In 25 and 50 Pound Boxes

Note—We can also furnish the following Dynamite in all Strengths at an advance in Price.
Nitro Glycerine, Gelatine, Semi-Gelatine, Low Freezing Nitro Glycerine and Low Freezing Semi-Gelatine.

DYNAMITE BLASTING CAPS

Caps cannot be Shipped with Dynamite, nor by Express

Per 1000

No. 4—(XXXX) Gold Medal; Quadruple Force; 650 Grammes Fulminate in 1,000 1¼ in. Long $13 20

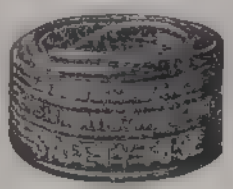
No. 5—(XXXXX) Gold Medal, Quintuple Force, 770 Grammes Fulminate in 1,000; 1¼ in. Long 14 50

No. 6—(XXXXXX) Gold Medal; Sextuple Force; 1543 Grammes Fulminate in 1000, 1½ in. Long 16 00

No. 3—(XXX) Silver Medal; Triple Force, 540 Grammes Fulminate in 1000; 1¼ in. Long 12 00

All Caps 50 in a Box, Weight 4 Lbs. per 1000

SAFETY FUSE



For Dynamite and Blasting Powder

50 Feet in a Coil; Two Coils in a Package

Per 1000 Feet

No. 1—Single Tape; for Damp Work....$7 30

No. 2—Double Tape; most generally used for Wet Work 8 80

No. 3—Triple Tape; for submerged work 10 30

No. 4—Gutta Percha; for use in water....10 00

No. 5—Crescent; double wound Cord and Tape, White finished; for very wet work 8.00

6,000 Feet in a Case; Weight from 115 to 135 Lbs. per Case

BLASTING POWDER

F FF FFF

BLACK; the Medium Grained Powder, FF, is most popular; F is seldom used; Powder is most economical in Road Construction, Soft Ores, Coal, etc.

Grades	F	FF	FFF
Per Keg	$1 60	1.60	1.60

Put up in 25 Lb. Sheet Iron Kegs

CAP CRIMPERS AND FUSE CUTTERS

KING COMBINATION

Five Tools in One; Fuse Cutter, Cap Crimper, Fuse Splitter, Pocket Knife and a Cap and Fuse Inserter; this Tool does away with many of the dangers connected with old methods of handling Dynamite.

Per Dozen

No. 5T—6 inches Long; Nickel Plated Steel $11 00

Weight 4 Lbs. per Dozen

Per Dozen

No. 3T—Combination; only Tool necessary for Users of Dynamite; Round End Handle for Punching Cap Holes; End Cutter for Crimping Caps; Side Cutter for Cutting Lengths of Fuse; Length 5¾ in.; Nickel Plated Steel.....$12.00

Open Stock; Weight 2 Lbs. per Dozen

ELECTRIC FIRING SAFEST

Electric Firing is by far the safest, because there is no waiting for the Shot to go and no doubt when it is going to explode; it allows the Blaster to retire to an unexposed place in perfect safety and without undue haste, and eliminates all danger of accident because of miscalculation of the time it takes fuse to burn or because of defective fuse, which has frequently resulted in injury to men who have returned to examine a blast about the time it exploded. In coal mines electric firing does away with practically all danger of the blast igniting gas and makes it possible to have every man out of the mine when blast is fired.

BLASTING SUPPLIES

BLASTING MACHINES

PUSH DOWN

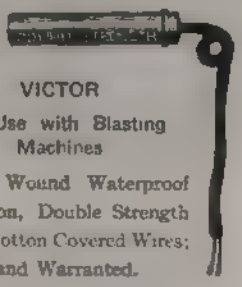
For large Railroad, Quarrying and Mining Work, Submarine Blasting, etc.

	Each
No. 3—Capacity 1 to 30 Holes; Size 13x9 x6¾ in., Hardwood, Varnished, Corners strongly Screwed; Leather Strap Handle	$25 00

Weight 35 Lbs. Each

Every Machine inspected at Factory and Guaranteed to work satisfactorily.

ELECTRICAL EXPLODERS



VICTOR

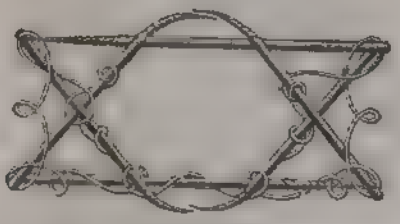
For Use with Blasting Machines

Double Wound Waterproof Insulation, Double Strength Caps, Cotton Covered Wires; Tested and Warranted.

Length, Feet	Wt., Lbs. per 100	No. in Box	Per 100
4	3½	50	$3.50
6	5¼	50	4.04
8	6¾	50	4.58
10	8	50	5.12
12	9¾	50	5.66
14	12	50	6.20
16	14	25	6.74

4 to 14 ft. 500 in a Case; 16 ft. 250 in a Case

MINERS' SQUIBS



For Coal Mining

Used to light a number of fuses in a hurry. Burns very slowly and will not blow out easily. Use Squib, as it comes in a box, letting it lie loosely in hole.

	Per Case of 100 Boxes
No. 1 Improved Safety Rocket	$22 00

100 in a Box, 100 Boxes in a Case
Weight 28 Lbs. per Case

SQUIB BOXES

	Per Dozen
No. 5—IC Tin, Waterproof; Size 7x1⅛x⅞ inches	$1.00

Weight 2 Lbs. per Dozen

BLASTING PAPER

Guaranteed Waterproof; for Wrapping Blasting Powder in.

	Per Pound
12 in. Wide; made of Pure Fiber	$0 10

Weight About 5 Lbs. per Roll

CONNECTING WIRE

ONE POUND SPOOLS

See Builders' Hdw. Dept. for Prices

BLASTING WIRE

See Builders' Hdw. Dept. for Prices

DYNAMITE THAWERS

Galvanized Iron, Size 9x9x16½ in.; Full Basin with water, place Dynamite in Tubes and put lighted Miner's Lamp under and it requires no more attention.

	Each
No. 20—For 20 Sticks, Weight 12 Lbs.	$10 50
No. 12—For 12 Sticks, Weight 11 Lbs.	9.00

One in a Box

ELECTRIC FUSE AND CIRCUIT TESTERS

THE BLASTER'S FRIEND

Reduces blasting accidents to a minimum by instantly revealing defective Electric Fuses and Blasting Wire Circuits; it is of great assistance to the man who is responsible for the results of the blast.

	Each
No. 18—Size 5x3½x1½ in., fits in the pocket.	$14.00

Weight ¾ Lb. Each

REGULATORS

SATURN

No. 57—Solid Oak Case, Antique Finish, Height 34¾ in., Width 15¾ in.; 12 in. Dial, 30 Day Movement.... $16.00

Weight 40 Lbs. Each

ELFRIDA

Mahogany Case, Highly Polished; Height 49 in., Width 19 in., 10 in. Dial

	Each
No. 58—8 Day, Time Only	$18 25
No. 59—8 Day, Time, Strike and Cathedral Gong	19 75
No. 60—30 Day, Time Only	20 45

Weight 70 Lbs. Each

SOLENT

No. 61—Solid Oak Case, Antique Finish; Height 36¾ in., Width 13¾ in., 8 in. Dial, 8 Day Movement — Each $13 75

Weight 40 Lbs. Each

SCHOOL HOUSE, OFFICE AND KITCHEN CLOCKS

STAR POINTER

Quartered Oak Case, Highly Finished and Decorated; Height 32½ in., Upper Width 17½ in., Lower Width 11 in.; 12 in. White Dial.

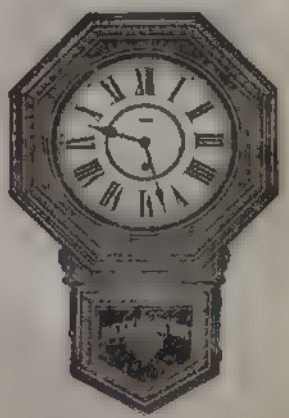
	Each
No. 62—Eight Day Time and Calendar	$8 70
No. 63—Eight Day Time	6 30

One in a Case; Weight 23 Lbs. Each

REGULATOR

No. 64—Quartered Oak Case, Highly Finished and Decorated; Height 38½ in., Width 15½ in.; 12 in. White Dial; Eight Day Time — Each $9 70

One in a Case; Weight 28 Lbs. Each



PATCHEN

Quartered Oak Case; Highly Finished; Height 27 in., Upper Width 17½ in., Lower Width 9¾ in.; 12 in. White Dial.

	Each
No. 65—Eight Day Time and Calendar	$6 05
No. 66—Eight Day Time	5 60

One in a Case; Weight 20 Lbs. per Case

ENGINE ROOM OR LEVER CLOCKS

CANTON

Each

No. 67 Eight Day Movement; 8 in. White Dial, Nickel Plated; Brass Case and Sash; 11½ in. Diameter at Back....$5 80

One in a Pasteboard Box; Weight 4 Lbs. Each

WOOD LEVER

Each

No. 68—Eight Day Movement; 8 in. White Dial, Brass Sash; Polished Veneered Oak Case, 11 in. Diameter at Back $5 80

One in Pasteboard Box; Weight 5¼ Lbs. Each

ENGINE LEVER

Brass Plated Metal Case, 6 in. Dial

No. 69—One Day Movement; Wt. 4 Lbs. $5 80

No. 70—Eight Day Movement; Wt. 5 Lbs. 8 70

Six in a Case

CARRIAGE OR RUNABOUT AND AUTOMOBILE CLOCKS

DUANE

An Inexpensive Clock for Carriage and Runabout Use

One Day Movement

Each

No. 71—Polished Brass Case; Height 3½ in., Width 2⅛ in., 1⅛ in. White Dial $2 90

One in a Box; Weight ½ Lb. Each

NEW ORMOND

For Automobile Use

To Wind these Clocks, the Water Tight Bezel is unscrewed, and when replaced, a perfectly Plain, Smooth Surface is presented on every part of front and back; the Movement is especially designed to withstand the jar of the car when in motion; there is no Winding Key or Regulator Lever or any part subject to movement from vibration; the Clock can be easily polished without disturbing the Movement in any way.

Each

No. 72—Heavy Brass Case, with Off-set; Height 4 in., Diameter 4 in., 3 in. Porcelain Dial $11 60

One in a Box; Weight 2 Lbs.

SAVANNAH

Each

No. 73—Heavy Brass Case, with Off-set; Height 4½ in., Width 4½ in., 3 in. Porcelain Dial $12 35

One in a Box; Weight 2 Lbs.

Note—These Clocks can be furnished in Nickel or Black Enamel Finish

RELIABLE MERCHANDISE CARRIERS

In Store, Warehouse, Machine Shop Foundry, Factory, Mill, Packing Houses and hundreds of other places, an overhead carrying system can be a very profitable investment Grabbed with rope slings forgs or hooks box truck, platform, etc , raised by a Chain Hoist or any other Safety Lift and pushed around by even a boy, a large amount of goods or material can be moved quickly easily and cheaply

Reliable Carriers are made of best malleable Iron Japanned Black and guaranteed to safely carry the loads listed the wheels have case hardened bushings roller bearings and axles; the center shackle is swivel and the connecting bars are free to turn at both ends, for rounding curves or turning load in any desired position. The carrier takes very little space, the track dropping but 4 inches from ceiling. Track hangers are spaced 18 in. apart.

Shipped Direct from Factory at Danville, Ill.

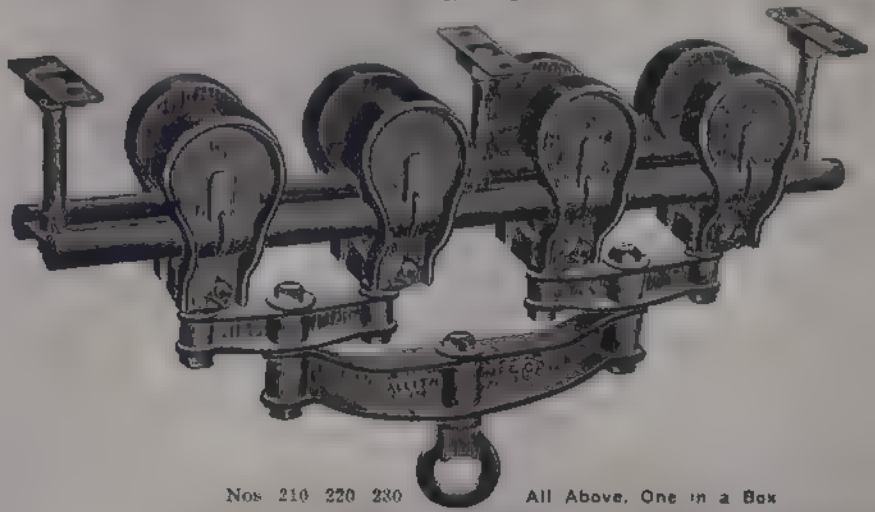
FOUR WHEELER

Each

No. 110—Capacity 500 Lbs. Carrier 5¾ in Wide, 16½ in Long and 13 in High Wheels, 2 in Diam **Takes No. 11Z Track; Track may be placed within 4 inches of Ceiling; Weight 21 Lbs. Each** $6 00

No. 120—Capacity 1,200 Lbs.; Carrier 6¾ in. Wide, 19 in. Long and 15 in High: Wheels, 2½ in Diam , **Takes No. 22Z Track; Track may be placed within 5¼ inches of Ceiling; Weight 31 Lbs Each** 8 40

No. 130—Capacity 2,500 Lbs.; Carrier 7¼ in. Wide, 21 in. Long, and 17 in. High Wheels 4¼ in Diam , **Takes No. 33Z Track; Track may be placed within 7 inches of Ceiling, Weight 46 Lbs. Each** 13 20



Nos 210 220 230 All Above, One in a Box

TANDEM, EIGHT WHEELER

Suitable for Heaviest Work in Warehouses, Depots, Foundries and Machine Shops, etc.; Fully Guaranteed to carry load specified

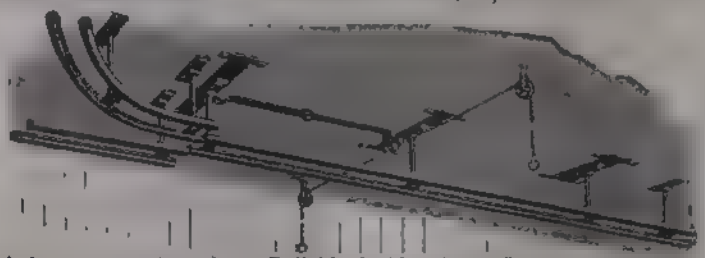
Each

No. 210—Capacity 750 Lbs ; Carrier 5⅜ in Wide, 25½ in. Long and 15 in. High; Wheels, 2 in. Diam.; **Takes No. 11Z Track; Track may be placed within 4 in. of Ceiling, Weight 37 Lbs. Each** $12.00

No. 220—Capacity 2,000 Lbs.; Carrier 6⅝ in. Wide, 27 in. Long and 17¼ in. High; Wheels, 2½ in. Diam.; **Takes No. 22Z Track; Track may be placed within 5¼ in. of Ceiling Weight 61 Lbs. Each** 19.20

No. 230—Capacity 4,000 Lbs.; Carrier 7½ in Wide, 29 in. Long and 19⅛ in. High; Wheels, 4¼ in. Diam.; **Takes No. 33Z Track; Track may be placed within 7 in. of Ceiling, Weight 87 Lbs. Each** . . [illegible]

RELIABLE MERCHANDISE CARRIER TRACK, CURVES AND SWITCHES



The track is the regular tubular construction of our Reliable Ladder, Barn, Parlor and Fire Door Pattern, in parallel double tread Double tread ties, ceiling plates and parting pieces are furnished for 18 in spacing and the carrying capacity is figured on this basis Two lag screws or bolts for each ceiling plate and one machine bolt for suspending track binder from ceiling plate, are required for each 1½ ft. of track; these are not furnished; ⅞ in. track takes ⅝ in. Lag Screws and ⅜ in. Machine Bolts; 1⅛ in. track takes ½ in. Lag Screws and ⅝ in. Machine Bolts; 1⅜ in. track takes ⅝ in. Lag Screws and ¾ in. Machine Bolts.

STRAIGHT TRACK

Per Foot

No. 11Z—Merchandise Track, with Supports every Eighteen inches; ⅞ in. Diam.; For No. 110 and 210 Carriers $0 36
Weight 2 Lbs. per Foot

No. 22Z—Merchandise Track, with Supports every Eighteen inches; 1⅛ in. Diam.; For No. 120 and 220 Carriers ..... .48
Weight 4½ Lbs. per Foot

No. 33Z—Merchandise Track, with Support every Eighteen inches, 1⅜ in. Diam.; For No 130 and 230 Carriers .72
Weight 6 Lbs. per Foot

CURVED TRACK Per Foot

No. 11ZU—Curved Merchandise Track, with Supports every Eighteen inches; ⅞ in. Diam.; For No. 110 and 210 Carriers $1.20
Weight 2 Lbs per Foot

No. 22ZU—Curved Merchandise Track, with Supports every Eighteen inches; 1⅛ in. Diam.; For No. 120 and 220 Carriers 1.44
Weight 4½ Lbs. per Foot

No. 33ZU—Curved Merchandise Track, with Supports every Eighteen inches, 1⅜ in. Diam.; For No 130 and 230 Carriers 1.80
Weight 6 Lbs. per Foot

SWITCHES

Mounted, Complete with Bolts

Each

No. 112—Two Way Switch for No. 11Z Track; Weight 120 Lbs Each... $50.00

No. 113—Three Way Switch for No. 11Z Track; Weight 180 Lbs. Each. . 60 00

No. 222—Two Way Switch for No. 22Z Track; Weight 125 Lbs. Each . 50 00

No. 223—Three Way Switch for No. 22Z Track; Weight 185 Lbs. Each.... 60.00

No. 332—Two Way Switch for No 33Z Track Weight 130 Lbs Each 50 00

No. 333—Three Way Switch for No. 33Z Track, Weight 190 Lbs Each.. . 60 00

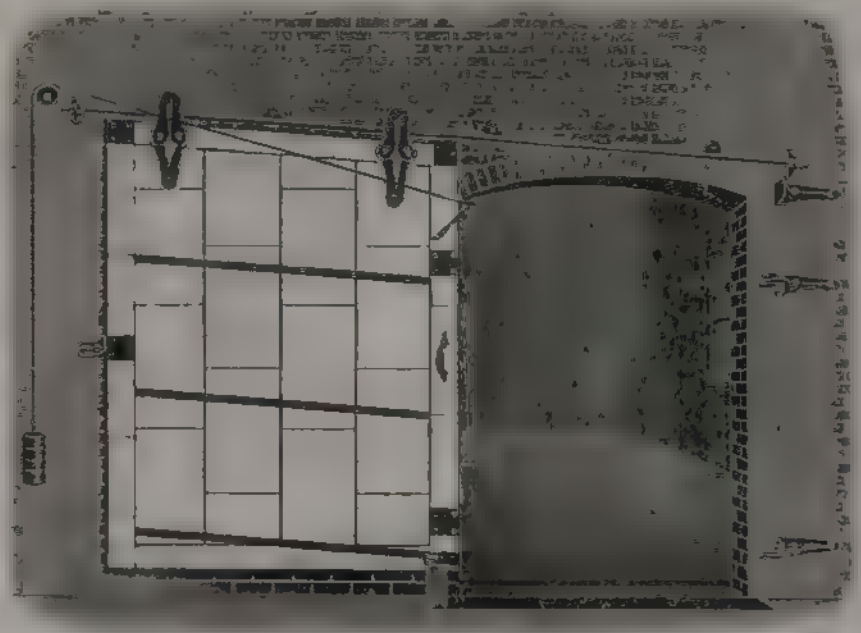
In Ordering, give No. and Size of Track

ALLITH SLIDING FIRE DOOR FIXTURES AND DOORS

For Outside or Inside Doors, Fire Wall Openings, Shutters, etc., Running Right and Left

UNDERWRITERS INSPECTED HARDWARE LABORATORIES

Hangers, Track and Fixtures are Approved and Accepted by the National Board of Fire Underwriters. Will mail Blue Prints of Approved Hardware and Doors on Application

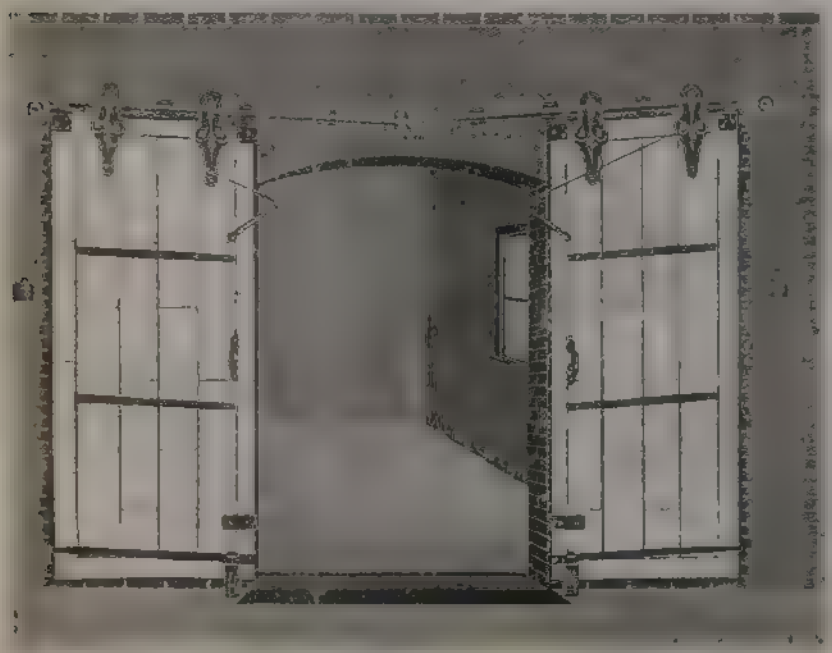


FOR SINGLE SLIDING DOOR

This Style is often preferred because of its Simplicity and ease of application. It has one link fastened to the front of Door and projecting into opening

	Per Pair
No. 3—Hangers; Weight 20 Lbs. per Pair	$4.20
No. 6—Hangers, Double Adjustable; Weight 30 Lbs. per Pair	6.00
	Per Foot
No. 3T—Track, With Supports. Length of Track required is twice the width of opening plus one foot; Weight 2¼ Lbs. per Ft.	$0.30
	Per Set
No. 700—Fixtures; Not including Hangers and Track; Weight 86½ Lbs. per Set	$9.50

For Hangers and Track, see Page 227



FOR DOUBLE SLIDING DOORS

This style of Door, sometimes known as Split Slide Doors, is intended for use on openings which are so situated as to make it impossible to use single slide doors

	Per Set of 4
No. 3—Hangers; Weight 60 Lbs. per Set	$8.40
No. 6—Hangers, Double Adjustable; Weight 60 Lbs. per Set	$12.00
	Per Foot
No. 3T—Track, with Supports; Weight 2¼ Lbs. per Foot. Length of Track required is twice the openings plus 8 inches.	$0.30
	Per Set
No. 1700—Fixtures; Not Including Hangers and Track; Weight per Set 146½ Lbs.	$19.20

Note that the Wall Bolts are not included, those required are, One for Each of the Brackets, Back Stop, Upper and Lower Binder, Stay Roller and Puliey, all ¾ in. Diam. to go through the wall

	Prices on Specifications	Per Square Foot
2½ in. Three Ply Fire Door, Tin Covered, Made to Size Ordered, Underwriters' Specifications		$0.80

REVOLVERS

U. S. DOUBLE ACTION

2½ Inch Barrel, Nickel Plated

For .22 Rim Fire, .32 and .38 Caliber Center Fire Cartridges

22 caliber, 7 shot, each.....$3 00
32 caliber, 5 shot, each..... 3.00
38 caliber, 5 shot, each..... 3.50

Specially designed as a pocket pistol for celebration purposes; solid frame.

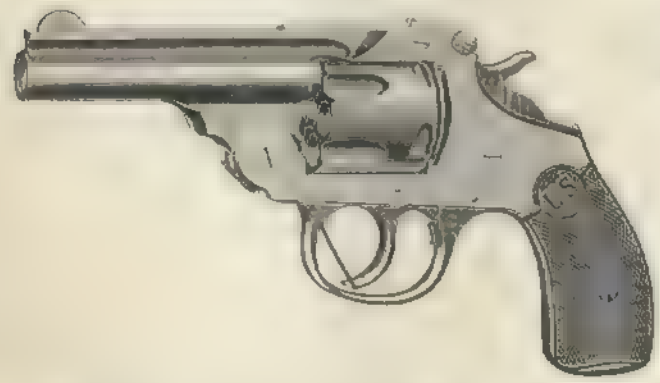
IVER JOHNSON, DOUBLE ACTION

2½ Inch Octagon Barrel, Nickel Plated

For .22 and .32 Caliber Rim Fire, Also .32 and .38 S. & W. Center Fire Cartridges

22 caliber, rim fire, 7 shot, 2½ in., weight 10½ ozs., each $4 00
32 caliber, rim fire, 5 shot, 12 ozs., each 4 00
32 caliber, S. & W. center fire, 5 shot, weight 12 ozs., each 4 00
38 caliber, S. & W. center fire, 5 shot, weight 17 ozs., each 4.00

U. S. HAMMER AUTOMATIC EJECTOR



For .32 and .38 S. & W. Center Fire Cartridges

U. S., .32 caliber, 5 shot, 3 in. barrel, nickel plated, each $5 00
U. S., .32 caliber, blued, each 5 50
U. S., .38 caliber, 5 shot, 3 in. barrel, nickel plated, each 5 00
U. S., .38 caliber, blued, each 5 50

U. S. HAMMERLESS, AUTOMATIC EJECTOR

For .32 and .38 S. & W. Center Fire Cartridges

U. S., 32 caliber, 5 shot, 3 in. barrel, nickel plated, each $5 80
U. S., 32 caliber, blued, each 6 30
U. S., 38 caliber, 3 in. barrel, nickel plated, each. 5 80
U. S., 38 caliber, blued, each 6 30

WESTERN GRIPS

Iver Johnson "Western" Walnut Grips are made from one piece of wood. The illustration shows the "Western" Grip on a safety hammer automatic revolver. They can be furnished on Iver Johnson safety hammer and hammerless revolvers in .22, .32 and .38 calibers with from 2 to 6 in. barrels.

Iver Johnson, Western Grip, each $1.00

REVOLVERS

Iver Johnson's

AUTOMATIC, SAFETY HAMMER

For .22 and .32 Caliber Rim Fire, .32 and .38 Caliber S. & W. Center Fire Cartridges

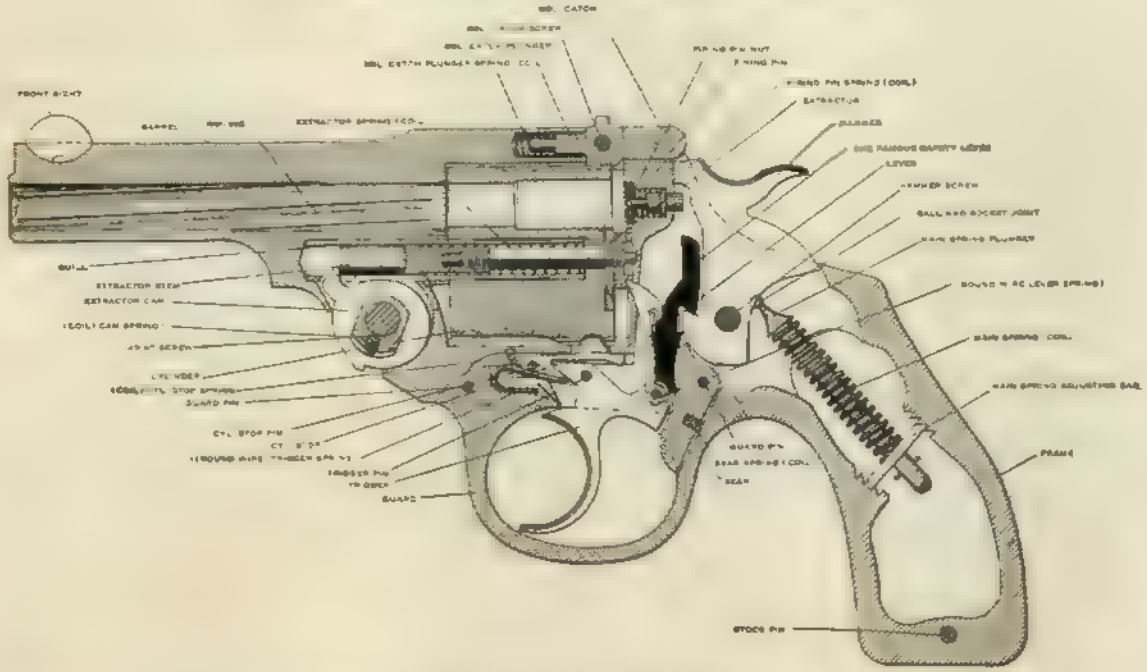
.22 caliber, rim fire, 7 shot, 3 in. barrel, nickel plated, each	$8 00
Blued, each	8.50
32 caliber, S. & W. center fire, 5 shot, 3 in. barrel, each	8.00
Blued, each	8.50
.38 caliber, S. & W. center fire, 5 shot, 3¼ in. barrel, each	8.00
Blued, each	8.50
Extra for long barrel, 4 in., each	.25
Extra for long barrel, 5 in., each	.50
Extra for long barrel, 6 in., each	.75

AUTOMATIC, SAFETY HAMMERLESS

For .22 and .32 Caliber Rim Fire, .32 and .38 Caliber S. & W. Center Fire Cartridges

.22 caliber, rim fire, 7 shot, 3 in. barrel, nickel plated, each	$9 00
Blued, each	9 50
.32 caliber, S. & W. center fire, 5 shot, 3 in. barrel nickel plated, each	9 00
Blued, each	9.50
.38 caliber, S. & W. center fire, 5 shot, 3¼ in. barrel each	9 00
Blued, each	9 50
Extra for long barrel, 4 in., each	.25
Extra for long barrel, 5 in., each	.50
Extra for long barrel, 6 in., each	.75

SECTIONAL VIEW OF IVER JOHNSON REVOLVERS



Wire Springs Throughout

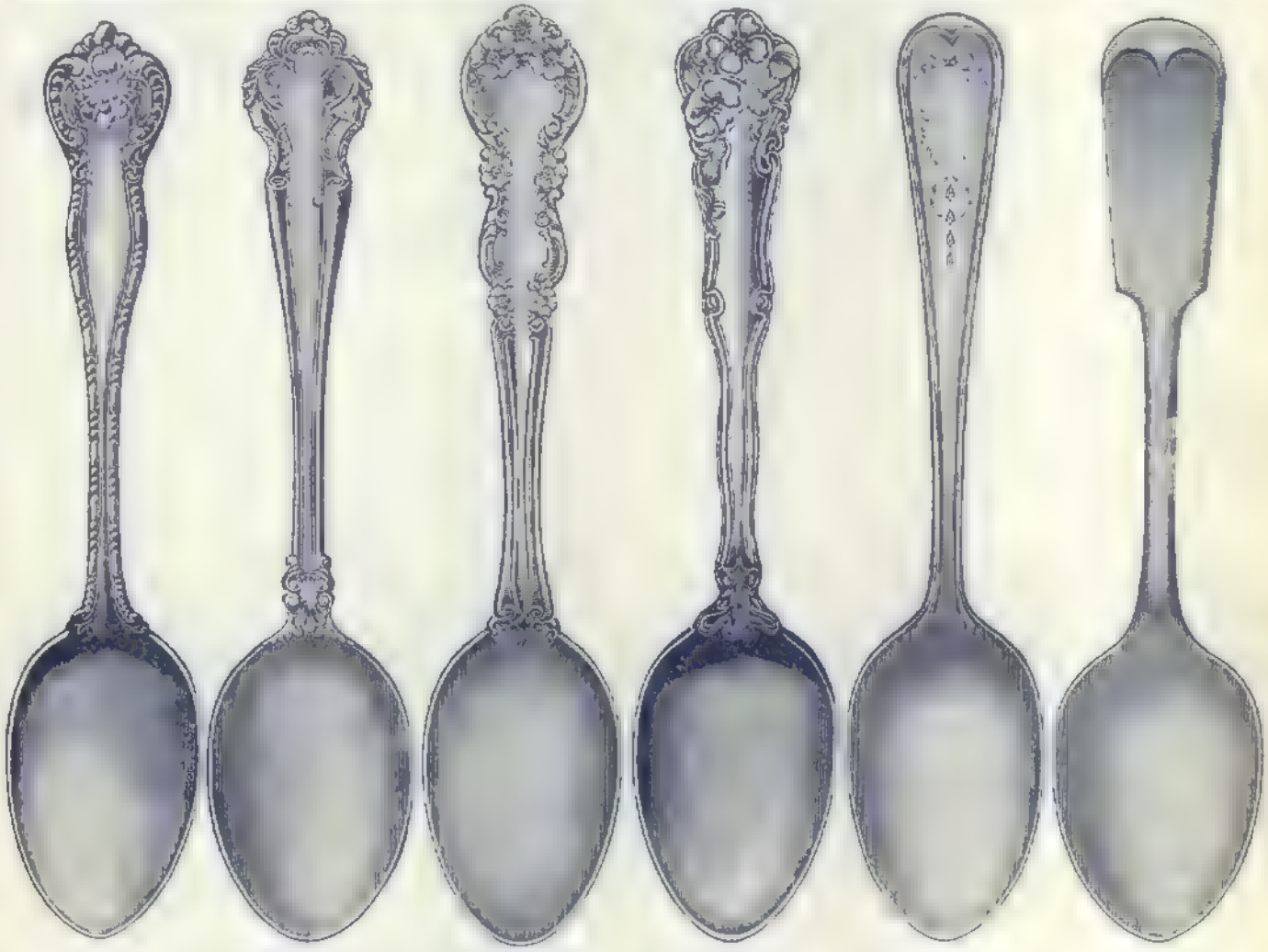
Every spring in the Iver Johnson is made of the finest piano wire drawn tempered, replacing the old flat springs. In the coil springs of the Iver Johnson the tension is sustained equally throughout every part of the coil. There is no one point to weaken under use and finally break down

Wm. Rogers "Eagle Brand" Wallingford Ct.

FINE SILVER PLATED FLATWARE

XII Sectional and Triple Plated on 21 Per Cent Nickel Silver

Prices are Per Dozen Except Sugar Shells and Butter Knives



YORK PATTERN

Tea Spoons

No.		Per doz
1674	XII Plate	$7.28
1675	Triple "	7.22

Dessert Spoons

1676	XII Plate.	$ 9.44
1677	Triple "	12.23

Table Spoons

1678	XII Plate.	$10.56
1679	Triple "	14.44

Dessert Forks

1680	XII Plate.	$ 9.44
1681	Triple "	12.23

[illegible]

1682	XII Plate	$10.56
1683	Triple "	14.44

Sugar Shells

		Each
1684	XII Plate..	$0.83

Butter Knives

1685	XII Plate..	$0.97

CEDRIC FRENCH GRAY PATTERN

Tea Spoons

No.		Per doz
1686	XII Plate	$7.28
1687	Triple "	7.22

Dessert Spoons

1688	XII Plate.	$ 9.44
1689	Triple "	12.23

Table Spoons

1690	XII Plate	$10.56
1691	Triple "	14.44

Dessert Forks

1692	XII Plate	$ 9.44
1693	Triple "	12.23

Medium Forks

1694	XII Plate	$10.56
1695	Triple "	14.44

Sugar Shells

		Each
1696	XII Plate..	$0.83

Butter Knives

1697	XII Plate..	$0.97

HARDWICK FRENCH GRAY PATTERN

Tea Spoons

No.		Per doz
1698	XII Plate	$7.28
1699	Triple "	7.22

Dessert Spoons

1700	XII Plate	$ 9.44
1701	Triple "	12.23

Table Spoons

1702	XII Plate	$10.56
1703	Triple "	14.44

Dessert Forks

1704	XII Plate.	$ 9.44
1705	Triple "	12.23

Medium Forks

1706	XII Plate.	$10.56
1707	Triple "	14.44

Sugar Shells

		Each
1708	XII Plate..	$0.83

Butter Knives

1709	XII Plate..	$0.97

BERWICK FRENCH GRAY PATTERN

Tea Spoons

No.		Per doz
1710	XII Plate	$7.28
1711	Triple "	7.22

Dessert Spoons

1712	XII Plate	$ 9.44
1713	Triple "	12.23

Table Spoons

1714	XII Plate	$10.56
1715	Triple "	14.44

[illegible]

1716	XII Plate.	$ 9.44
1717	Triple "	12.23

Medium Forks

1718	XII Plate	$10.56
1719	Triple "	14.44

Sugar Shells

		Each
1720	XII Plate..	$0.83

Butter Knives

1721	XII Plate	$0.97

GARRICK FRENCH GRAY PATTERN

Tea Spoons

No.		Per doz
1722	XII Plate	$7.28
1723	Triple "	7.22

Dessert Spoons

1724	XII Plate	$ 9.44
1725	Triple "	12.23

Table Spoons

1726	XII Plate	$10.56
1727	Triple "	14.44

[illegible]

1728	XII Plate	$ 9.44
1729	Triple "	12.23

Medium Forks

1730	XII Plate	$10.56
1731	Triple "	14.44

Sugar Shells

		Each
1732	XII Plate..	$0.83

Butter Knives

1733	XII Plate	$0.97

TIPPED

[illegible]

Tea Spoons

No.		Per doz
1734	XII Plate	$4.72
1735	Triple "	6.67

Dessert Spoons

1736	XII Plate.	$ 8.33
1737	Triple "	11.12

Table Spoons

1738	XII Plate	$ 9.41
1739	Triple "	13.34

Dessert Forks

1740	XII Plate.	$ 8.33
1741	Triple "	11.12

Medium Forks

1742	XII Plate	$ 9.44
1743	Triple "	13.34

FANCY PIECES NOT MADE IN TIPPED PATTERN

TRADE "1835" MARK
R·WALLACE

Celebrated Silver Plated Flatware

PLATED ON 18 PER CENT NICKEL SILVER
QUALITY GUARANTEED

Silver Plate that RESISTS wear

In appearance it has the refinement of sterling silver.

The one grade of Plated Flatware that combines in the highest degree excellence of execution and sturdiness.

FLORAL PATTERN

French Gray

Tea Spoons

N
1744 Triple plt. ... 25

Dessert Spoons

1745 Triple plt. $10.55

Table Spoons

1746 Triple plt $12.50

Dessert Forks

1747 Triple plt $10 55

Medium Forks

1748 Triple plt $12.50

Twist Butters

1749 Al plate .$10 10

Sugar Shells

1750 Al plate...$8.65

CARDINAL

French

Tea Spoons

N
1751 Al plate ... $ 4
1752 ... 6.25

Dessert Spoons

1753 Al plate ... $ 8.15
1754 Triple " ... 10.55

Table Spoons

1755 Al ... $ 9.10
1756 ... 12.50

Dessert Forks

1757 Al plate $ 8.15
1758 Triple " 10.55

1759 Al plate ... 9.10
1760 Triple " ... 12.50

Twist Butters

1761 Al plate..$10.10

Sugar Shells

1762 Al plate.. $8.65

TROY PATTERN

Tea Spoons

N
1763 Al plate ... $ 4
1764 Triple " ... 6.25

Dessert Spoons

1765 Al plate ... $ 8.15
1766 Triple " ... 10.55

Table Spoons

1767 Al plate .$ 9.10
1768 Triple " . 12.50

Dessert Forks

1769 Al plate ... $ 8.15
1770 Triple " ... 10.55

1771 Al plate $ 9.10
1772 Triple " . 12.50

Twist Butters

1773 Al plate..$10.10

Sugar Shells

1774 Al plate ... $8.65

MARQUETTE PATTERN

Tea Spoons

N
1776 Al plate ... $ 4.75
1778 Triple " ... 6.25

Dessert Spoons

1777 Al plate .$ 8.15
1778 Triple " . 10.55

Table Spoons

1779 Al plate .$ 9.10
1780 Triple " . 12.50

Dessert Forks

1781 Al plate ... $ 8.15
1782 Triple " ... 10.55

Medium Forks

1783 Al plate .$ 9.10
1784 Triple " . 12.50

Twist Butters

1785 Al plate..$10.10

Sugar Shells

1786 Al plate...$8.65

BLOSSOM PATTERN

Bright Steel

Tea Spoons

No.
1787 Al plate ... $ 4.75
1788 Triple " . 6.25

Dessert Spoons

1789 Al plate .$ 8.15
1790 Triple " . 10.55

Table Spoons

1791 Al plate ... $ 9.10
1792 Triple " ... 12.50

Dessert Forks

1793 Al plate ... $ 8.15
1794 Triple " ... 10.55

1795 Al plate ... 9.10
1796 Triple " . 12.50

Twist Butters

1797 Al plate .$10 10

Sugar Shells

1798 Al plate...$8.65

TIPPED PATTERN

Tea Spoons

N
1799 Al plate ... $ 4.10
1800 Triple " ... 5.75

Dessert Spoons

1801 Al plate ... $7.20
1802 Triple " ... 9.90

Table Spoons

1803 Al plate $ 8.20
1804 Triple " . 11 50

Dessert Forks

1805 Al plate ... $ 7.20
1806 Triple " ... 9.90

Medium Forks

1807 Al plate ... $ 8.20
1808 Triple " ... 11.50

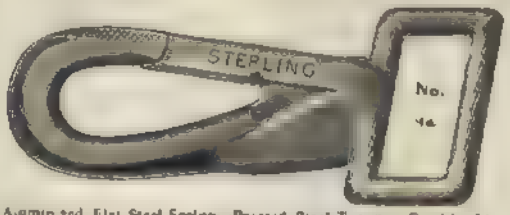
Twist Butters

1809 Al plate ... $ 9.00

Sugar Shells

1810 Al plate...$7.70

"Sterling" Loop Snaps



Aluminized Flat Steel Spring—Pressed Steel Tongue. Combined in this fastener are many meritorious features, viz.: Price—Quality Strength Neatness and Security. In these it is the "PEER" of any Trade is extra large and strong, suitable for heavy double snaps and will take extra large ring. No. 34 – Made in All Sizes and Finishes.

COVERT MFG. CO., TROY, N. Y.

Here You Are!

Handiest brace and bit ever offered. Pulls tacks and nails out or drives them in. Opens boxes, goes for any kind of screwing and boring. Fits as an accessory in every well-organized domestic establishment, needs to carry it to get its convenience. Small size, small price, thought of by the carpenter made.

This tool in 14 and 18 inch size will create a sensation for carpenters and contractors

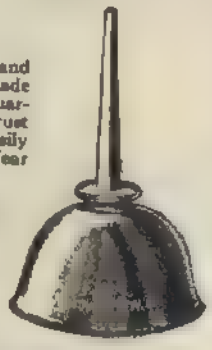
"BONNER"

Household Utility Tool

is drop forged from special formula steel and extra well tempered. Nickel plated. Packed in box. A splendid seller and a big payer.

C. E. Bonner Mfg. Co.
Champaign, Ill.

"Wall" Oilers

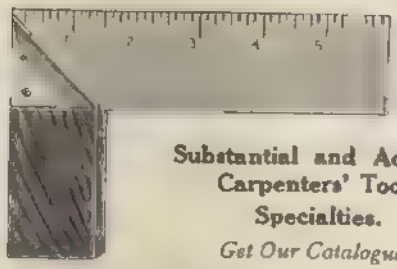


positively insure you against kicks and comebacks. Each is carefully made of the best materials and fully guaranteed for 5 years. They won't rust or corrode. All obstructions are easily removed. Can be heated without fear of melting the bottom out.

Style and sizes for every possible requirement—all the same high quality in design, material and workmanship, each backed by our guarantee.

Get prices and catalog before placing any oiler order.

P. WALL MFG. SUPPLY CO.
N. S., PITTSBURGH



MITRE SQUARE

Substantial and Accurate Carpenters' Tools.
Specialties.
Get Our Catalogue.

SCREWS, SQUARES, and COMBS.

SOUTHINGTON HARDWARE CO.,
SOUTHINGTON, CONN.

Legal Cans for Gasoline

Legal Gasoline Cans are hard workers—they stand the strains of heavy service.

They're made from galvanized iron, hand brushed with a heavy coat of red enamel, fitted with brass or tin screw cap on spout, or compression faucet, depending upon the size.

Made in 1 to 5-gallon capacities.

Delphos Mfg. Co.
Delphos, Ohio

AXES

The "Axe Through Iron" is the best made.

MANUFACTURED BY
ROMER AXE CO.
DUNKIRK N. Y.
Write for Catalogue

Page-Storm Wrenches

Drop forged from the best tool steel — heat treated with workmanship — [illegible] and strength — [illegible] Arm shapes [illegible] They are unsurpassed for strength.

Be sure to have a stock. Our catalog H will aid in selecting.

Write for it to-day.

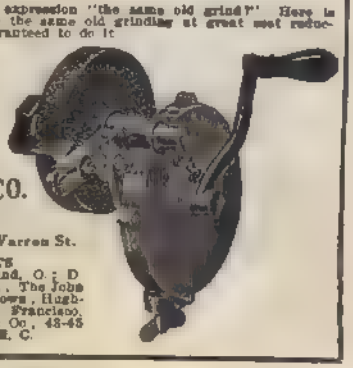
Page-Storms Drop Forge Co.
CHICOPEE, MASS.

Perfection Grinder No. 3

Did you ever hear the expression "the same old grind?" Here is something different; twice the same old grinding at great cost reduction. This grinder is guaranteed to do it.

Not only is better work performed with this corundum wheel but the greater area cutting quality permits of large variety of work not possible with less efficient grinders.

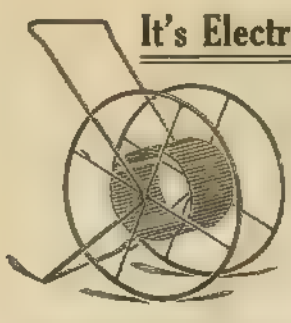
This [illegible] interesting shop grinding may contain suggestions for you. Write for facts.



EL STARR MFG. CO.
MILWAUKEE, WIS.
New York Office, 37 Warren St.

SELLING AGENTS
Wm. P. Wroonan, Cleveland, O.; D. P. Hale Sandersville, Ga., The John A. Gregg Co., Burlington, Iowa; Hughson & Merton, Inc., San Francisco, Cal.; Myles A. Hoffman & Co., 43-45 Great Tower St. London, E. C.

It's Electrically Welded



No Bolts
No Screws
No Rivets

Ask about them
Your jobber knows

McKINNON DASH COMPANY
Buffalo, N. Y.

The best and largest line of Halters and Ties on the market.
Ask your Jobber for them.
Manufactured by **E. T. Rugg & Co., Newark, Ohio**

One of the New "ATLAS FAST SELLERS"

Atlas Strap Hinge

Built Like a Suspension Bridge

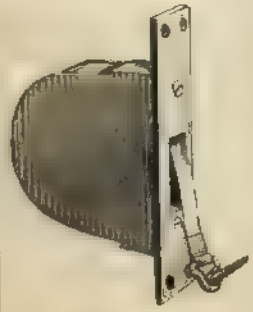
Stronger, lighter and more attractive than wrought iron hinges. Heavy Japan finish. Packed one pair with screws in paper box. An attractive shelf package. Every hinge guaranteed to give satisfactory service

Write for samples and prices

Atlas Mfg. Co., New Haven, Conn.

Have you seen the Atlas Trouser Hanger?

Caldwell Sash Balance



¶ Does away with weights and cords, and VASTLY more durable.

¶ Makes sashes work perfectly.

¶ Permits greater window space in new work, as box frames are not necessary.

¶ May be applied to old windows without altering sashes or frames.

¶ Write for circular to the

CALDWELL MFG. CO.
3 Jones St., Rochester, N. Y.

THE WORCESTER

BLOUNT DOOR CHECK

We have a proposition that is a winner

Write at once

Worcester Mfg. Co. 10 E. Worcester St. Worcester, Mass.

VALENCE

"Artistic" Hardware

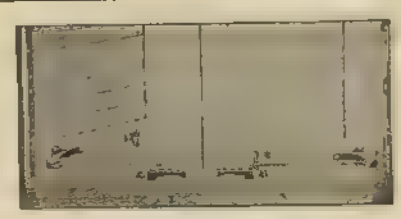
A NEW-AND-ATTRACTIVE DESIGN IS OUR

"VALENCE"

OTHER NEW DESIGNS COMING

Made by
Reading Hardware Company
Reading, Pa.

New York, Philadelphia, San Francisco, Chicago



The Superior Shutter Fastener

The Superior is a sure locking shutter fastener—it locks or bows in any position desired. We help sales, by helping to explain—we furnish a model free. Write to-day—and ask about our line of hog and poultry troughs.

AMERICAN FOUNDRY & MFG. CO., FREDERICK, MD.

Berger's Wrought Star Ears

THIS is as fine an ear as can be made. Every piece is perfect, with fine finish, nicely tinned, same size and thickness as our malleable Star Ears.

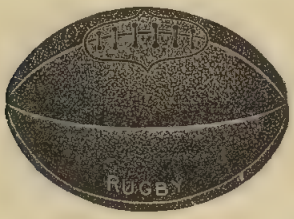
No. 30 corresponds to malleable No. 3, etc. Furnished in gross boxes or in bulk to suit the purchaser.

Sample mailed free upon request

Berger Bros. Company
Mfrs.
Office 237 Arch Street
Warerooms and Factory, 100 to 114 Bread St.
Philadelphia

Foot Ball Goods

"Arrow Quality"



Our Official Rugby Football

8689 Rugby football is made from the best grade of **real English grain leather.** We import this ourselves so as to be sure of the quality, and in consequence we know absolutely that the stock which we offer you is the best the market affords. Our footballs last longer than those not made with genuine English leather. Our footballs kick true. Each..... $12 00

8690 Made from best American leather in same careful manner, but does not have the patent lace. Furnished with full sized heavy pure gum bladder, and designed to sell in competition with the best balls of any other make. Each..... $8 00

8691 A high grade, medium priced leader. Strong American grain leather, regulation in size and shape and equipped with best grade bladder. Each..... $5 00

8692 A boy's perfect football. Full size and carefully shaped. Made from selected India pebbled leather and furnished with a genuine pure rubber bladder. Each $3 00

Rugby Bladders

8698 Our Special Intercollegiate, pure gum, gray, extra heavy. Each..... $2 50

8699 Standard quality, pure gum gray. Each..$1 60

Rugby Shin Guards

8702 Full size, brown tan front, with white back, cane ribs and strong straps. Per pair..... $1 00

8703 Tan canvas, with cane ribs and white lining, heavy padding and strong straps. Per pair..... $1 50

8704 Brown leather front, with felt lining, cane ribs and brown leather straps. A strong guard. Per pair..... $2 00

8705 Best moleskin front, with felt back, strong leather straps and rattan ribs. Per pair..... $2 50

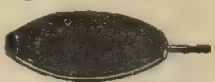
8706 Special brown tan leather front. Per pair $3 00

American Association Foot Ball

8693 This is the perfect ball and official for use in any game. We guarantee that it is just right in weight, size and shape. It is made from the best grade of English leather, our selection, and the workmanship, to pass our inspection, must be without a flaw. It has strongly welted seams and a guaranteed, heavy weight, pure gum bladder. Packed in sealed box, with rawhide lace, lacing needle and inflator. Each..... $10 00

8694 Best grade of American grain leather, especially designed for football use. Regulation in construction, and furnished with a pure gum bladder. Each..... $7 00

8695 A full sized ball, carefully shaped and well made. The stock is best selected India pebbled leather and the bladder is pure gum. Each..... $4 00



Association Bladders

8696 Our special, pure gum gray, extra heavy. Each..... $2 50

8697 Standard quality, pure gum, gray. Each...$1 60

Our Association Shin Guards

8700 Selected brown tan canvas with rattan ribs. Heavy felt lining and strong leather straps. Has special ankle protecting pieces. Per pair..... $2 00

8701 Best selected black tan leather with heavy felt lining. Cane ribs and strong leather straps. Has special ankle protectors. Per pair..... $3 50

8707

Rubber Nose Guards

8707 Our special with protecting pieces for the cheek bones. Best grade of rubber, light, strong and well ventilated. Elastic at top around forehead. Each..... $2 00

8708

8708 Original Morrill style, with detachable mouth-piece. Each..... $1 50

If We Serve You Well, Tell Others; If Not, Tell Us.

"THE HOUSE OF QUALITY"

Athletic and Sportsman's Clothing

Basket Ball or Sprinting Shirt, Sleeveless, Cotton. The following Color Combinations carried in stock:

247 Maroon and White. Each..$1 00
248 Navy and White. Each..... 1 00
249 Black and Orange. Each.... 1 00
250 Gray and Maroon. Each.... 1 00
251 Plain White. Each 1 00
252 Plain Blue. Each..... 1 00

257 Basket Ball Pants, Khaki. Padded in Hips. Per pair.....$2 00

FULL LENGTH GYMNASIUM OR TURNING PANTS

263 Best Pants made of good grade all-wool flannel cut to order from Yale gray Bristol mix, steel, or Shaker gray Flannel. Per Pair..$6 00

SLEEVELESS WORSTED JERSEY

High Grade Basket Ball or Sprinting Shirt, Stock Colors: Maroon and White, Oxford and Maroon, Black and Orange, Navy and White.

258 Medium Weight. Each.....$4 00
259 Any Plain Color, without striping. Each 2 50
260 Plain Blue Cotton. Each.... 1 50
261 Cotton Striped. Each. 1 00

WORSTED BATHING SUIT

One-Piece Suit. Skirt attached.

264 Blue Body, with White Border. Each $7 00
265 Oxford Body with Black Border. Each 7 00

Two-piece Suits, same as above.

266 Blue Body with White Border. Each 7 00
267 Oxford Body with Black Border. Each 7 00

COTTON BATHING SUITS.

One-Piece Suit. Skirt attached.

268 Blue Body with White Border. Each $4 00
269 Oxford Body with Black Border. Each 4 00

The quality and workmanship of our entire line of Athletic Clothing is of the Superior Kind. We Guarantee Satisfaction.

Indoor Ball Jersey Striped Cotton.

253 Maroon and White. Each . $2 50
254 Navy and White. Each .. 2 50
255 Black and Orange. Each.... 2 50
256 Gray and Maroon. Each ... 2 50

262 Sprinting Pants, Cotton, White or Blue. Per Pair. $1 00

WRESTLING TIGHTS

270 Worsted, full length, Navy, Maroon or Grey. Per pair.....$6 00
271 Leather Knee Pads for above. Per pair $1 50

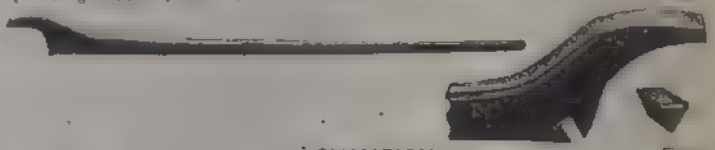
All Prices Subject to the Regular Discount, Except Those on Diamonds. Pages 1 to 16.

CAR MOVERS OR STARTERS

Japanned Malleable Iron Castings, Maple Handle, Refined Square Tool Steel Spur with four sharp edges which may be removed and changed when dull. Heavy Steel Spring which is fastened to the rail prevents undue wear of the spur and assists the operator by releasing Spur from the Rail. Pressing down on Handle acts on the rail when spur is clear from its contact with the rail that the mover is allowed to roll forward, instead of wasted in an effort to raise it from the track.

SAMSON CAR MOVERS	Each
No. 64—Length 64 in., for Flat and Box Cars	$6 00
Weight 16 Lbs. Each	
EXTRA SPURS, for Railway Car Movers	Each
No. 64S—Square for Present Style	$0 50
No. 64T—Triangular for Old Pattern	50
EXTRA HANDLES For Railway Car Movers	
Length 54 in., with Cast Iron Ferrule	$1.00

SAMSON LOCOMOTIVE CAR MOVERS	Each
No. 70—Length 70 in.; for Locomotives and the Heaviest Car Service; Weight 21 Lbs. Each	$9 00
EXTRA SPURS, for Locomotive Car Movers	
No. 70X—Square for Present Style	$0 [illegible]
EXTRA HANDLES, for Locomotive Car Movers	
Length 60 in.; With Cast Iron Ferrule	$1 50



BADGER NEVERSLIP

[illegible] Handle is pressed down it lengthens and follows the Wheel. Best Selected Hardwood Handles; Strong Malleable Castings.

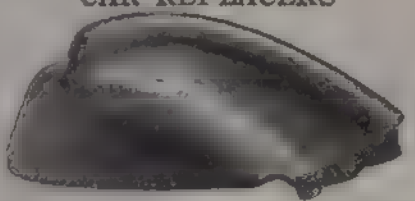
	Each
No. 63—Length 63 in.	$6.00
Weight 15 Lbs. Each	
EXTRA SPURS	Each
No. 63X—Square, for Badger shown above	$0 60

CHAMPION

	Each
No. 60—All Steel Bar, with Adjustable Hardened Jessop Steel Spur, Length 5 Feet; will Work on any style Brake or Wheel; will not Slip on Ice or Grease, Weight 15 Lbs. Each	[illegible]
EXTRA SPURS	
Triangular, for Champion, shown above	$0.50

CAR REPLACERS

Quickly Replaces Locomotive or Cars, made of ¼ in. Steel Plate.



No Bolts or Nuts to Loosen or get out of order

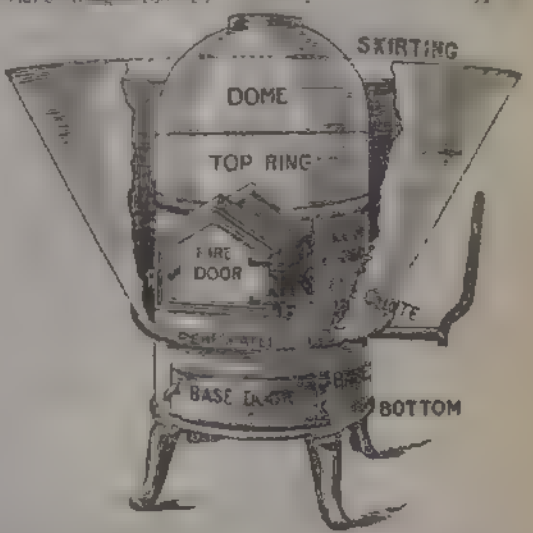
ALEXANDER WRECKING FROGS OR CAR REPLACERS

	Per Pair
No 4 For Traction Cars and Motor Engines 30 Lbs	$ 1
No 5 For 5 in Rails, Weight 180 Lbs.	
No 6 For 6 in Rails Weight 100 Lbs	21

SAND DRIERS

Used by Railroads, Mines, Street Pavers in Laying Asphalt Pavement, etc. The Furnace uses Hard or Soft Coal, Coke or Wood Use Clear Sand only, as earth or Clay will merely bake and not discharge itself from the Hopper.

The Grating adds greatly to the life of Stove by preventing baking of sand and consequent burning of Castings.



COMPLETE DRIERS

	Each
No. 1—Without Grating Capacity 10 Tons [illegible] Weight 1200 Lbs. Each	$75 00
No. 2—Without Grating, Capacity 5 Tons Daily; Weight 750 Lbs. Each	60 00
No 10 With Grating Capacity 10 Tons Daily Weight 1280 Lbs. Each	85.00
No 20 With Grating Capacity 5 Tons Daily; Weight 735 Lbs. Each	72 00

EXTRA PARTS

Name of Part	For No. 1 or 10 Wt. Lbs.	For No. 1 or 10 Each	For No. 2 or 20 Wt. Lbs.	For No. 2 or 20 Each
Starting	[illegible]	$1. [illegible]		$ [illegible]
Top or Dome	121	2 50	55	5 50
Top Ring	181	3 70	83	7 50
Door Barre	129	1 00	57	5 00
Feed Chute and Door	72	3 00	70	5 50
Feed Door	15	1 20	14	1.20

All Above, Open Stock

Name of Part	For No. 1 or 10 Wt. Lbs.	For No. 1 or 10 Each	For No. 2 or 20 Wt. Lbs.	For No. 2 or 20 Each
Perforated Ring	56	$ 1 00	44	$ [illegible]
Grate	80	3 50	35	
Starting	[illegible]		[illegible]	
Base with Ash Door	1	5 00	[illegible]	
Bottom	57	4.00	27	2.50
Foot	10	70	10	70
External Grating	177	21 00	110	12 00

JACK SCREWS

No. 138—LOCOMOTIVE

Cast Iron Frame; Wrought Iron Screw. The Threads of Screw are fine enough for Power and coarse enough for Speed of Movement. The Standards are Specially shaped to insure Strength and supplied with sufficient Threads to equal the Strength of the Screw. Used for Raising Buildings, Locomotives, Cars, Stationary Engines, Boilers, etc.

Diam. of Screw, In.	1½	1½	1⅝	1½	1½	1⅝	1⅝	1¾	1¾	2	2	2	2
Height of Stand, In.	6	8	10	12	14	8	10	12	14	6	8	10	12
Height over all	9	11	13	15	17	11¼	13¼	15¼	17¼	9½	11½	13½	15½
Capacity, Each, Tons	12	12	12	12	12	16	16	16	16	20	20	20	20
Weight Each, Lbs.	12	15	19	23	24	18½	22	25	30	19	23	27	31
Each	$3.75	4.25	4.75	5.25	6.00	5.00	5.75	6.25	6.75	5.25	6.00	6.75	7.50
Diam. of Screw, In.	2	2	2	2½	2½	2½	2½	2½	2½	2½	3	3	3
Height of Stand, In.	14	16	18	10	12	16	18	20	22	24	16	20	24
Height over all	17½	19½	21½	14½	16½	20½	22½	24½	26½	28½	21	25	29
Capacity Each, Tons	20	20	20	28	28	28	28	28	28	28	36	36	36
Weight Each, Lbs	35	41	45	35½	40	50	54	60	63	75	70	85	101
Each	$8.25	9.25	10.25	9.75	10.75	13.25	14.50	15.75	17.00	18.25	20.75	23 25	25 75

JACK SCREWS

No. 136 -BELL BASE RATCHET

Wrought Iron Screw, Cast Iron Stand and Cap; Steel Ratchet Pawl and Handle, for Loaded Cars and all Heavy Work.

Diam Screw, In.	2½	2½	3	3
Hgt over all, In.	24	30	24	30
Lift'g Cap., Tons	32	32	40	40
Wt Each, Lbs.	64	82	84	104
Each	$25.50	29.00	35.00	40.00

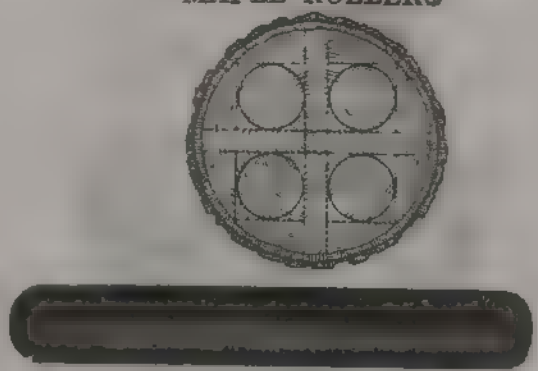
No. 134 CAST IRON

For House Raising, Jacking up Ceilings, Stone Fronts, etc., Smooth Uniform Threads; Diam. of Screw 3 in. Capacity, Safe Load 10 tons, made of Cast Iron.

Height, In	18	20	22	24	26
Wt Ea., Lbs	49	51	54½	56½	58
Each	$3 25	3 50	3 75	4 00	4.25
Height In	28	30	32	34	36
Wt Ea., Lbs	60	63	65	75	80
Each	$4 50	4 75	5 00	5 25	5.50

All Above, Open Stock

MAPLE ROLLERS



Made from Finest Quarter Sawed Rock Maple; none of the Wood Heart is used; for use in Moving Buildings, or Large Heavy Machinery, etc.

Size, In.	Each	Size, In.	Each
3 x36	$0.50	6 x60	$3.55
3 x48	.70	6 x72	4.25
3½x36	.70	6 x84	5.00
3½x48	95	7 x60	2 90
4 x36	.90	7 x48	3.90
4 x48	1 20	7 x56	4 55
4 x60	1 50	7 x60	4 90
4 x66	1 70	7 x72	6 00
5 x36	1 40	7 x84	7 10
5 x48	1 90	7½x48	4 60
5 x60	2 40	7½x56	5 50
5 x72	2 90	7½x60	5 90
5½x60	2 95	7½x72	7 20
5½x72	3 60	8 x48	5 40
6 x36	2.10	8 x56	6.40
6 x48	2 80	8 x60	6 90
6 x56	3 30	8 x72	8 40

Diam., In	3	4	5	
Wt. Each, Lbs	2	4	6	
Diam., In	6	7	7½	8
Wt. Each, Lbs	9½	13	14¾	17

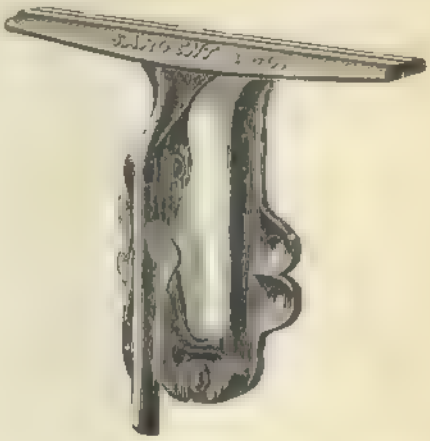
SAW VISES

SARGENT & CO.

Wentworth Improved Pattern

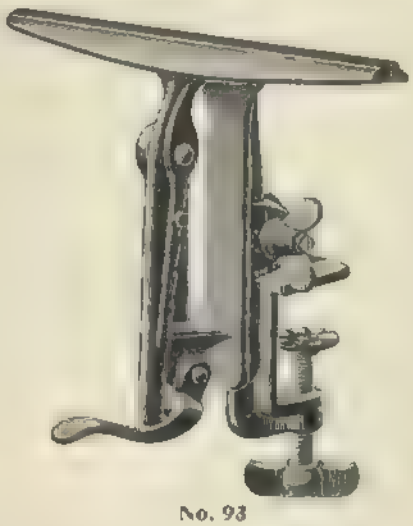
Vanadium Alloy Steel Jaws

No. 151. Japanned, polished face, 12 in. jaws, per doz $32.00
No. 152. Japanned, polished face, 10 in. jaws, per doz 44.00



No. 100. Japanned, polished face, 9 in. jaws, per dozen $17.00

No. 94



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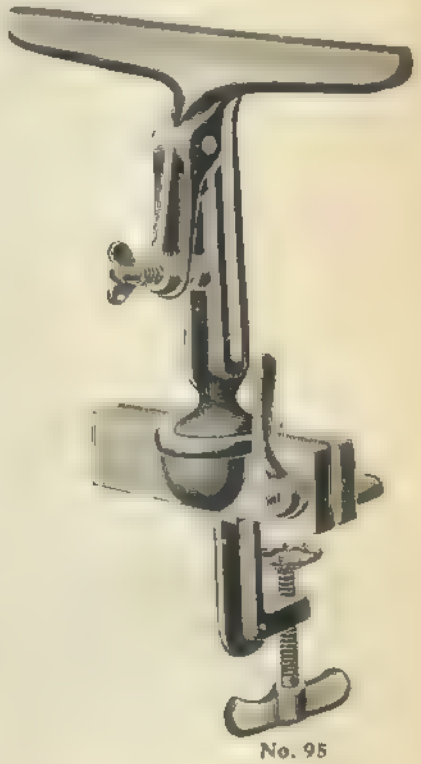


No. 95

No. 93. Japanned, 9½ in. jaws, per dozen..... ....$22.00

With screw clamp for fastening to bench and screw adjustment for holding the vise at any angle.

No. 94. Japanned, 9 in. jaws, per dozen $22.00

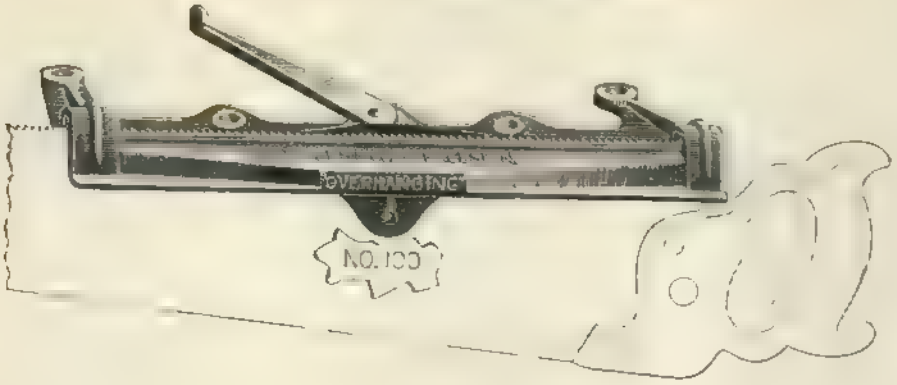
With screw clamp for fastening to bench and screw adjustment for holding the vise at any angle.

No. 95. Japanned, 9 in. jaws per dozen $30.00

With screw clamp for fastening to bench, ball and socket adjustment for holding the vise at any angle.

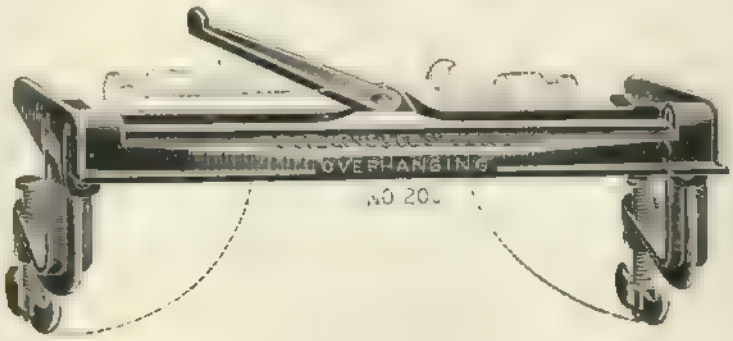
SAW VISES

PERFECTION PATTERN, OVERHANGING



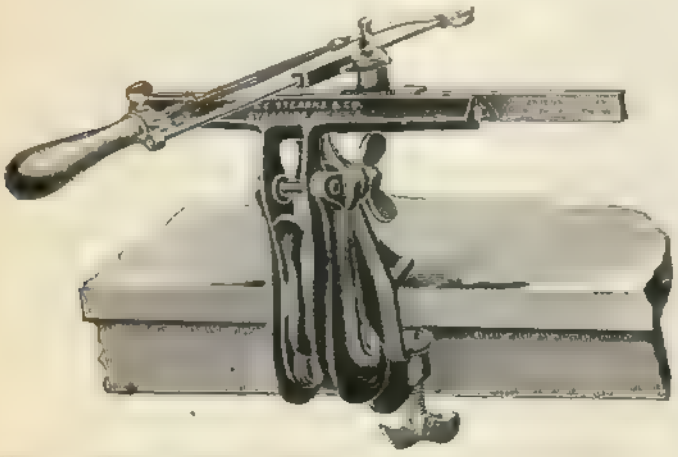
No. 100. Japanned .....per dozen, $9.00

OVERHANGING, FOLDING



No. 200. Japanned, noiseless rubber-cushioned jaw.....per dozen, $15.00

SAW FILING GUIDE AND VISE



No. 11. 10½ in. rubber cushioned jaws, per dozen....$30 00

The guide has three rigid positions in which it holds the file for filing the saw teeth at right angles to the other saw, and a third for filing rip saws only.

One in a box

DIKEMAN FOLDING SAW CLAMP

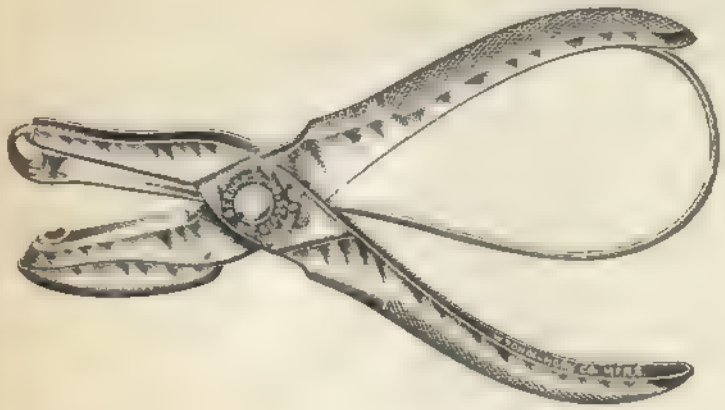
(With saw clamped ready for filing)

(Back view, folded)

All steel, rubber pad underneath the back jaw, black enamel and polished nickel finish.

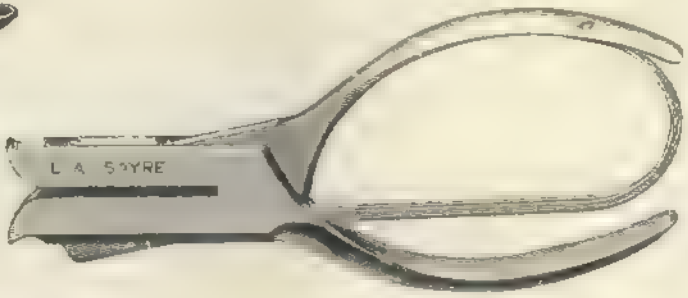
No. 77. Dikeman Saw Vise, per dozen $12.00

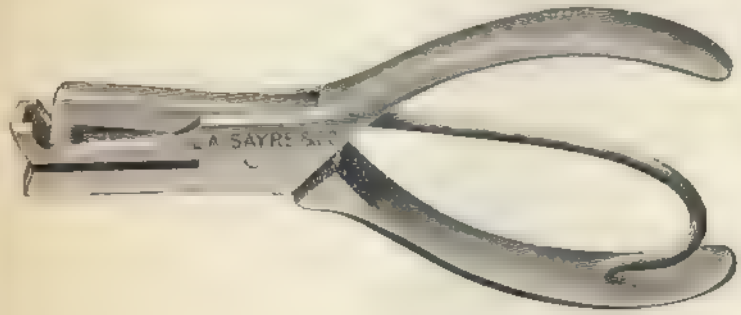
TICKET PUNCHES



No. 260. Size, 5 in., per dozen..... $4 25
Full nickel-plated; the reservoir, which opens and shuts with a spring, [illegible]ons the [illegible]pring.
One-half dozen, 6 assorted designs, in a box

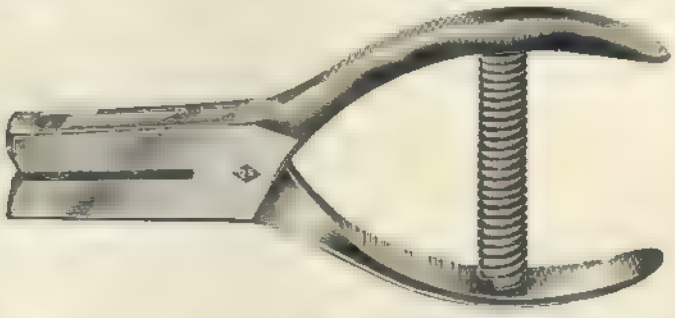
No. 42. Length of jaw, 1⅛ in., assorted dies, nickel plated, per dozen $20 00





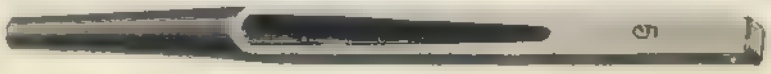
No. 435. Length of jaw, [illegible] in; nickel-plated, per dozen $9 00
One-half dozen in a box

No. 2. Conductor's punch, single dies, per dozen... $3 00
No. 2. Conductor's punch, double dies, per dozen 4. 00
This is a popular conductor's punch, is highly [illegible] and can be furnished in different designs



No. 3000. Climax Euchre. Length, 4 in., weight 3½ ounces, nickel-plated, per [illegible] $6 00
[illegible] in length [illegible] pieces

SADDLERS' OR BELT PUNCHES



Drop-forged Steel

No. 244. Size Nos.	1	2	3	4	5	6	7	8	9	10	11	12
Per dozen	$2 10	2 10	2 10	2 10	2 10	2 10	2 10	2 10	2.60	3.15	3.15	3.15

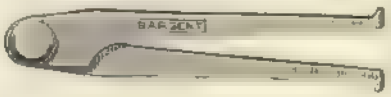
No. 244. Assorted sizes, 2 to 7. .....per dozen, $2.10
One dozen [illegible] sizes, or assorted, in a box

CALIPERS

Cast Steel

No. 60. Inches	6	8	10	12
Per dozen	$7 00	9.00	11.00	13.00

INSIDE CALIPERS



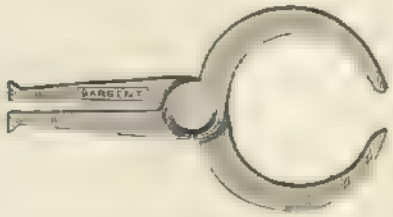
No. 262. Inches	3	4	5	6
Per dozen	$3 00	3.25	3 75	4.25
Inches	8		10	12
Per dozen	$6.00		8 00	10.00

OUTSIDE CALIPERS

No. 263. Inches	3	4	5	6
Per dozen	$3.00	3.25	3 75	4.25
Inches	8		10	12
Per dozen	$6.00		8 00	10 00

One-half dozen in a box

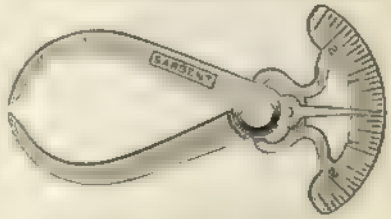
DOUBLE CALIPERS



Both Inside and Outside

No. 268. Inches	3	4	5	6
Per dozen	$3 50	4.25	5.00	6.00

SELF REGISTERING CALIPERS



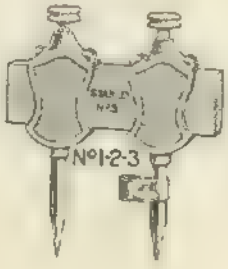
Both Inside and Outside
Nickel-plated with Set Screw

No. 165. Inches	3	4	5
Per dozen	$7.00	9.00	11.00

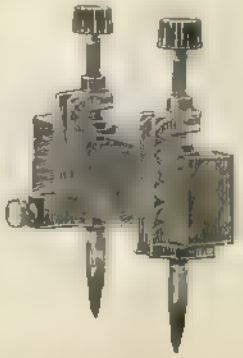
One-half dozen in a box

TRAMMEL POINTS

STANLEY'S



No. 2. Bronze, medium, for 1 in. straight edge, steel points on either of which an accompanying pencil socket can be clamped, per set $1 50



No. 4. Nickeled, for straight edge up to 1¼ in. The pencil socket holds either an ordinary lead pencil or carpenter's pencil, per set $0 75

One set in a box

PIANO SCARFS, BENCHES AND STOOLS

No. D9204

No.		Each.
D9204.	China Silk, Assorted Patterns All Colors, very Effective Delicate Shades, New Patterns constantly added	$5.35
D9207.	China Silk, Plain, Fair Quality, Green and Red	4.50
D9208.	Printed Satin, Assorted Border Patterns, All Colors, Fine Heavy Fringe, New Patterns constantly added	8.35
D9202.	Printed Satin Ribbon Stripe, Plain Colors, Very Rich, in Olive Green and Assorted Colors, Extra Heavy Fringe	9.20
D9209.	Printed Satin, Extra Fine, Assorted Border Patterns, All Colors, Extra Heavy Fringe, New Patterns Constantly Added	10.00
D9210½.	Printed Satin Ribbon Stripe, Border Pattern, Assorted Floral, Oriental, and Persian Designs, All Colors, Fine Fringe, New Patterns constantly added	9.20

SILK DAMASK.

D9100.	Mercerized Border Patterns, Green and Red	6.00
D9101.	Satin Damask, Woven Lace Border Patterns in Olive Green and Red, Fine Fringe	6.35
D9104.	Silk Damask, Plain Colorings, All Silk Border Patterns in Green and Red, Extra Fine Fringe	8.85

TOP SCARFS.

No. 9112

We manufacture a large line of TOP SCARFS, using the overlock stitch silk edge throughout, thereby obtaining the neatest effects possible. We can furnish them in Velour, Silk Plush, Silk Damask and Silk Rep, either with or without fringe, and can guarantee to provide the very latest novelties at all seasons.

No.		Each.
D9110½.	Plain Heavy Velour, 18 inches wide, overlock stitch Silk Edge, Panel Embossed Ends, No Fringe, Assorted Colors	$3.85
D9111.	Plain Heavy Velour, 18 inches wide, overlock stitch Silk Edge, Tassel Fringe on ends only, Assorted Colors	3.70
D9112.	Same as No. 9111, Fringe Ends and Front (see cut)	4.20
D9114.	Plain Heavy Velour, 18 inches wide, overlock stitch Silk Edge, Gold Painted Wreath on each end, Fringed Ends and Front	5.35
D9116.	Plain Silk Plush, 18 inches wide, overlock stitch Silk Edge, Panel Embossed Ends, No Fringe, Assorted Colors	8.35
D9118.	Plain Silk Plush, 18 inches wide, overlock stitch Silk Edge Fringe on Ends only, Assorted Colors	8.00
D9119.	Silk Damask, 17 inches wide, overlock stitch Silk Edge, Fringe on Ends and Front, Assorted Colors	5.50
D9120.	Mercerized Rep Cloth, 17 inches wide, overlock stitch Silk Edge, Fringe on Ends only, Assorted Colors	3.10
D9122.	Silk Rep Cloth, 17 inches wide, overlock stitch Silk Edge, Fringe Front and Ends, Assorted Colors	4.20

PIANO STOOLS.

MAHOGANY, EBONY AND WALNUT FINISHES.

No. D955.		Each $5.40
No. D955.	In Solid Oak	Each 5.75

COLONIAL STYLE

No. D9159.

Polished Top, 16x38 Inches, 20½ Inches High.

No.		Each.
D9159.	Polished Top	$19.30
	Solid Oak	21.80
	Solid Walnut	25.15
	Solid Mahogany	27.65
	With Music Compartment under Seat, extra List	4.50

No. D9159. P. C.

D9159 P. C.	Same as No. 9159, Cut with Plain Round Columns, Extra List	$1.80

These are our popular sellers—prices are exceptionally low.

No. D955

Make the little boy or girl happy—just what they want—durable, well constructed and of good quality—prices exceptionally low

No. 9107.

TOY PIANO STOOLS

No. 9107 Hard Wood, dark mahogany finish, 4 legs, full height 7¾ inches .....Each $ .90
No. 9108 Hard Wood, dark mahogany finish, 4 legs, adjustable seat with steel screw, full height 11½ inches .....Each 1.80

No 9108.

TOY PIANOS

No 9103.

No. 9100 10 Keys, with hinged lid, fancy panels, 11⅜x8⅞x7¼, rosewood finish in pasteboard box. Weight 2⅞ lbs. .....Each $2.65
No. 9101 15 Keys, with hinged lid, 15⅞x10¾x8⅛, rosewood finish, in pasteboard box. Weight 4½ lbs. .....Each 3.75
No. 9102 15 Keys, with hinged lid, neat metal bronzed standards and candelabra, 16½x14x9, rosewood finish, in pasteboard box. Weight 7¾ lbs. .....Each 7.50
No. 9103 18 Keys, ornamental legs and candelabra, 19x17½x10, rosewood finish, in pasteboard box. Weight 10⅞ lbs. .....Each 11.55
No. 9104 22 Keys, 3 panels, hinged lid, 23x24x11, handsomely finished in rosewood, each packed in wooden case. Weight 42½ lbs .....Each 18 25
No. 9105 37 Chromatic Keys, hinged lid 3 panels, 23x24x12, handsomely finished in rosewood, each packed in wooden case. Weight 47¾ lbs .....Each 28.75
No. 9106 37 Chromatic Keys, hinged lid, 3 panels, 25x27x13 handsomely finished in rosewood, each packed in a wooden case. Weight 59¾ lbs. .....Each 40 90

Note:—No stools are included with pianos.

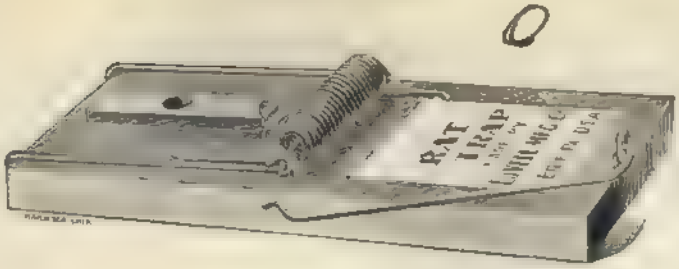
TOY OR YOUTHS' DRUMS

Illustrations Show About One-Eighth Actual Size

No. 91 Metal Shell, imitation brass, handsomely embossed, flag and shields, 7-inch, with sticks .....Each $1.10
No. 92 Metal Shell, handsomely embossed, star and crescent, 9-inch, with sticks and sling...Each 2 10
No. 93 Metal Shell, imitation brass, handsomely embossed, fancy pattern, 10-inch, with sticks and sling.....Each 2 50
No. 94 Metal Shell, imitation brass, handsomely embossed, with Eagle and American flags, 11-inch, with sticks and sling .....Each 2.90
No. 95 Metal Shell, nickel plated, snare drum pattern, heavy cord, two sheepskin heads, 12-in., with sticks and sling. Each 3.60
No. 96 Metal Shell, nickel plated, nickel plated band on hoops, 8 Prussian rods, one calf and one sheepskin head, 6 rawhide snares with snare strainer, 12-inch, with sticks and sling...Each 7.00
No. 97 Metal Shell, nickel plated, hoops bound with nickel plated band, heavy drum cord, 9 metal bound drum ears, 2 calfskin heads, 2 rawhide snares, 13-inch, with sticks and sling .....Each 7.00
No. 970 14-inch Bright Metal Shell, 7 inches high, 7 braces, natural colored, maple hooped, 6 snares, long pattern snare strainer, 1 calfskin and 1 sheepskin head, with rosewood sticks Each 14.60
No. 9070 14 inch Bright Metal Shell, 4½ inches high, 6 rods, natural colored maple hoops, 6 snares, long pattern snare strainer, 1 calfskin and 1 sheepskin head, with rosewood sticks .....Each 14.60

RAT TRAPS

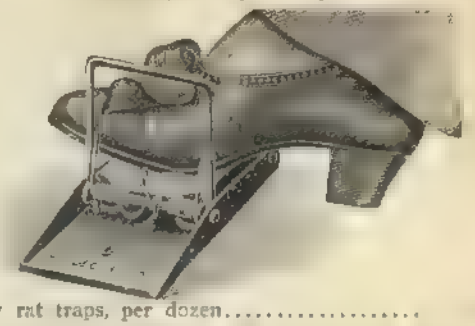
KNOCK-EM-STIFF



Knock-em-Stiff rat traps, per dozen $2 20

One dozen in a box

SECURITY RAT TRAP



Security rat traps, per dozen..... $3 60

These traps [illegible] not strike finger or foot in setting or releasing

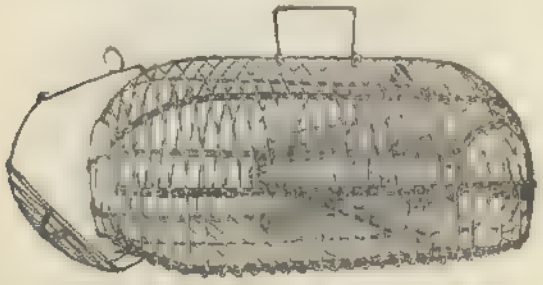
Giant, 20 in. long, 7¼ in. wide, 9 in. high, 10 [illegible] steel ribs and No. 19 [illegible] steel wire in mesh patent flanges, lacquered with rust proof lacquer..... per dozen, $7 50

One half dozen in a crate

	Length	Width	Height	Per Doz.
Surprise . .	15 in.	8 [illegible]	[illegible]	$3 75
Winner	17 in.	[illegible]	7½ in.	4.50

These traps have 9 coppered flat steel ribs, No. 17 coppered wire in mesh. Patent flange. Lacquered with rust proof lacquer.

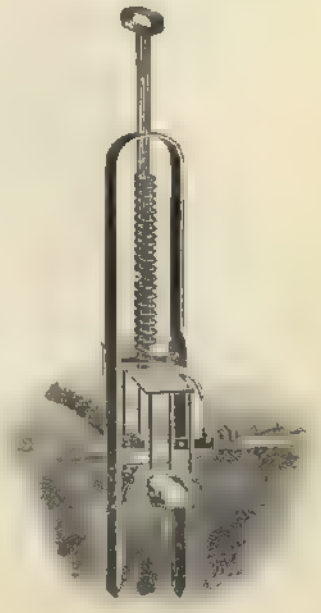
One half dozen in a crate



Ready. A [illegible] to [illegible] long, 10½ in. wide, 8 in. high, 11 flat steel ribs, No. [illegible] coppered wire in mesh, patent flange, lacquered with rust proof lacquer, per dozen..... $5 00

One half dozen in a crate

MOLE TRAPS



Reddick tinned mole traps, per dozen . $8 00

One half dozen in a crate

MOUSE TRAPS

2 and 3 Hole **4 and 5 Hole**

Wood Choker. No. holes.... 2 3 4 5
Per dozen $0 60 0 90 1.20 1 50
One dozen in a pac-

Security mouse traps, per dozen..... $1.50
All metal, will not warp or decay. Cannot strike finger in setting or releasing
One dozen in a box

Household, self setting, per dozen..... .$2 00

Tin Choker, 5 holes, self setting, per dozen.. ..... $1.50
One dozen in a package

Knock-em-Stiff, per dozen $ .75
One dozen in a box

Clipper, 9 in. long, 4 in. high, 4¾ in. wide, 7 r
¼ in. coppered wire mesh, lacquered, per doz $2.50
One half dozen in a package

BROOMS

SPLIT BAMBOO PUSH BROOMS

No. 0271. Length 14 in., 4 rows, solid bl length of stock 7 in clear, per dozen..... .... $8.13

GENUINE AFRICAN BASS PUSH BROOMS

No. 292. Length 16 in., 5 rows s l d bl ck, le gth f stock 7 in. clear, per dozen .$14.17

HEAVY STEEL WIRE PUSH BROOMS

No. 120. Flat tempered steel wire, length 12 in., 4 rows, length of wire 5 in., per dozen.....$10.00

SHORT & MASON ALTITUDE ADJUSTMENT BAROMETERS.

No. 1643

These barometers are specially designed to give U. S. Government Standard reading at any altitude. This device consists of an auxiliary hand (colored red), adjustably attached to the pressure or blue hand and moving with it, the object being to show at the same time the actual atmospheric pressure at the altitude where used and the corresponding U. S. Government Standard reading (sea level). The red hand foretells the weather; the blue hand gives the atmospheric pressure. The average reading of the barometer is 29.92. When red hand is below this mark the barometer is "Low;" when above this mark the barometer is "High."

No. 1640 Brass lacquered case; diameter 6 inches, closed porcelain dial; good quality; style cut No. 1384 Each $15.55

No. 1641 Brass lacquered case; diameter 5 inches, open metal silvered dial, first quality, style cut No. 1641 Each 25.45

No. 1642O Brass lacquered case; diameter 6 inches; open metal silvered dial compensated for temperature; first quality; style cut No. 1641. Each 32.50

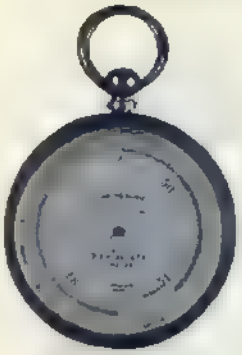
No. 1643 Brass lacquered case; diameter 6 inches, open metal silvered dial; first quality; style cut No. 1641 Each 32.50

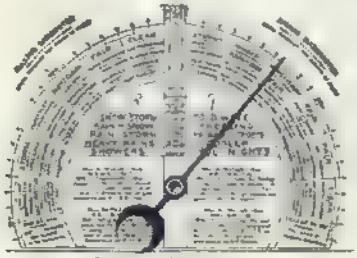
No. 1643 Brass lacquered case; diameter 5 inches, closed metal silvered dial; good quality; style cut No. 1643. Each 23.45

No. 1644 Brass lacquered case; diameter 5 inches; closed metal silvered dial with scale reading to 22 inches and can be used at an altitude of 5,500 feet; good quality; style cut No. 1643. Each 17.70

POCKET ANEROID AND ALTITUDE METERS.

Compensated—Open Face.


No. 1300.


Rawson Chart.

No. 1315

No. 1300 Gilt case; diameter 1¾ inches; silvered metal revolving dial; reading to 3,000 feet, first quality, style cut No 1300. Each $45.25

No. 1301 Gilt case, diameter 1¾ inches silvered metal revolving dial; reading to 5,000 feet; first quality; style cut No. 1300. Each ..... 4..40

No. 1302 Gilt case; diameter 1¾ inches, silvered metal revolving dial, reading to 10,000 feet first quality; style cut No .300 Each 43.95

No. 1305 Gilt case; diameter 2⅜ inches, silvered metal revolving dial, reading to 12,000 feet, first quality, style cut No 1300. Each 46.70

No. 1307 Gilt case; diameter 2½ inches, silvered metal revolving dial; reading to 15,000 feet, first quality style cut No 1300 Each 48.50

No. 1313 Gilt case; diameter 1¾ inches silvered metal revolving dial; reading to 8,000 feet medium quality, style cut No 1300 Each 19.10

No. 1314 Gilt case; diameter 1¾ inches, silvered metal revolving dial; reading to 8,000 feet medium quality; style cut No 1300 Each 20.50

No. 1315 Hicks Altitude Meter diameter 1¾ inches; nickeled, revolving metal dial controlled by stem wind, reading to 2,500 feet and resettable first quality; style cut No. 1315. Each 21.50

Rawson Chart, 5x5 inches, each 30c; 11x14 inches, each 50 This chart is of invaluable assistance in correctly reading a barometer and by studying it and the barometer, most accurate results are easily obtainable.

Weather. An attractive book full of details as to the use of various weather instruments and thoroughly explaining their manufacture and use In paper cover, 50c; in cloth cover $1.10.

MICROSCOPES.

No. 1401

No. 1407

No. 1403

No. 1400 Brass Upright Compound Microscope, single lens objective, in mahogany box, with one mounted object, one pair tweezers, two glass slips. Each ..... $ 4.40

No. 1401 Brass Upright Compound Microscope, triple lens objective, separable, giving three different powers, viz., 35 diameters for examining larger objects and 50 and 50 diameters for smaller objects In mahogany box, one mounted object one pair tweezers, two glass slips. Each 5.85

No. 1403 Brass Compound Microscope, mounted on jointed iron foot, so that it can be inclined to an angle, two lenses giving powers of 30 and 50 diameters, respectively; in mahogany box, one mounted object, one pair tweezers, two glass slips. Each 9.75

No. 1405 Brass Compound Microscope, mounted on jointed iron foot, allowing inclination to any angle, triple lens, separable, giving power of 35 to 100 diameters, in mahogany box, one mounted object, one pair tweezers, two glass slips. Each 13.15

No. 1406 Brass Compound Microscope, with condensing lens in front for illuminating opaque objects. Each 14.00

No. 1407 Same as 1406, and with rack and pinion for adjusting to focus. Each 17.70

CLINICAL THERMOMETERS AND CASES

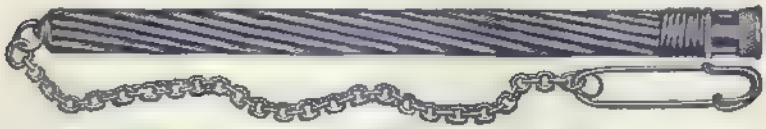
PRICES EACH

Thermometers

No. S3110

No. S3110	Thermometer, clinical, lens front in rubber case, certified 1 minute. each,	$ 1.80
No. S3110A	Thermometer, clinical, lens front in aluminum case, certified 1 minute. Each	2 30
No. S3110B	Thermometer, clinical, army and navy, guaranteed to register in less than 2 minutes, in aluminum case ..... each,	2.30
No. S3110C	Thermometer, clinical, Yale, 1 minute, in aluminum case . each	3 10
No. S3110D	Thermometer, clinical, government inspection... . . . each,	3.85
No. S3110E	Thermometer, clinical, Hick's, lens front, 2 minutes certified. . each,	6.15
No. S3110F	Thermometer, clinical, Hick's, lens front, 1 minute certified . . each,	9.20
No. S3110G	Thermometer, clinical, Hick's, lens front, ½ minute certified ..each,	10.00

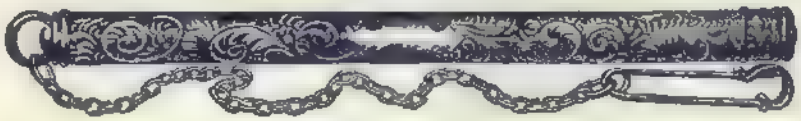
Thermometer Cases



No. S3112

No. S3116

No. S3113



No. S3114

No. S3112	Thermometer cases, sterling silver, twist ... . .each,	$ 3 55
No. S3114	Thermometer cases, sterling silver, chased.. .... each,	3 55
No. S3114A	Thermometer cases, sterling silver, tapering .. . . . each,	4 60
No. S3114B	Thermometer cases, rolled gold, engraved . ... each,	4 60
No. S3114C	Thermometer cases, rolled gold, chased . .. . each,	5 35
No. S3116	Thermometer cases, pearl, gold chased mountings . .....each,	6 30
No. S3118	Thermometer cases, pearl, gold chased mountings tapering . each,	7.70
No. S3118A	Thermometer cases, 10k solid gold .... each,	47 00

Thermometers

No. 65 Standard

No. 90

STANDARD

No.	Size	4-inch	6-inch	9-inch
65	Round brass case, first quality, style No. 65. Each	$4.40	$4 10	$5 90
66	Round nickeled case, first quality, style No 65 Each.. ..	5.15	5.15	6.90
67	Round ebonized case, first quality, style No 65. Each .	5.15	5.15	5 90
90	For household use in copper bronze or green metal size 3½ in. high, 3 in wide first quality, style No. 90. Each	5.90	.	. .

No. 955

No. 956

Hygrometers

No. 955 Patent Spiral Hygrometer, 3-inch dial, in polished golden oak, green oak and mahogany wood ca e Denotes humidity without reference to tables . .. . . each, $ 6 40

No. 953 2 inch, same as No. 955, in nickel case .... .each, 3 10

No. 956 French make, reliable, 4½ inches, brass case, metal silvered dial, with curved thermometer at base... ..each, 22.65

BODY STRAP SLEIGH BELLS

FANCY BROADWAY STRAP

Best Quality Black Harness Leather Strap; 7½ ft. Long, 1⅜ in Wide; Double Sound with Enameled Leather and Fancy Stitched with Red Silk Thread, Single Stitched Point; Leather Covered Buckle, Furnished with Stay Straps; 48 Size 2 Wrought Brass Arctic Bells, 1¼ in. Diam., Strongly Riveted; Sweet Sounding and Very Rich Looking.

	Per String
No. 376G—Gold Plated	$11 00
No. 376S—Silver Plated	11 00

Weight 4¼ Lbs. per String

PLAIN BROADWAY STRAP

Best Quality Black Harness Leather Strap, 7 ft. Long, 1⅜ in. Wide Edges Neatly Rounded and Finished; Single Stitched Point; Japanned Buckle; 54 Size 2 Wrought Brass Arctic Bells, 1¼ in. Diam., Strongly Riveted; Sweet Sounding.

	Per String
No. 393G—Gold Plated	$12 00
No. 393N—Nickel Plated	11 00

Weight 4½ Lbs. per String
One String in a Carton

QUEBEC

	Per String
No. 011—Black Leather Strap, 7½ ft. Long, 1⅜ in Wide Japanned Buckle; Billet Riveted on, 20 2½ in. Wrought Steel, Nickel Plated Arctic Bells Strongly Riveted to Strap	$4 20

One String in a Carton; Weight 4½ Lbs. per String

RIM BELLS, Wired on Russet Strap

Heavy Russet Leather Strap, 7½ ft. Long, 1 in. Wide, Lined with Grain Leather; XC Plate Buckle, Polished Steel Rim Bells, Assorted Sizes; Wire Fastened; very Pleasant and Harmonious.

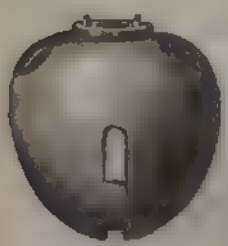
	Per String
No. 056—19 Bells, Assorted Sizes, Eight 1¼ in., Six 1⅜ in., Two 1⅛ in., Two 1⅝ in., One 1¾ in Diam.	$2 60

Weight 3¼ Lbs. per String

No. 060—19 Bells, Assorted Sizes, Four 1½ in., Four 1¾ in., Four 1⅞ in., Two 2⅛ in., Two 2¼ in., One 2⅜ in Diam.	4 00

Weight 4¾ Lbs. per String
One String in a Carton

GLOBE BELLS, Cast Bell Metal



Globe

Riveted on Leather Strap, 7½ ft. Long, 1 in. Wide, 36 Bells, 1¼ in. Diam., on Polished Black Strap

	Per String
No. 504—Gold Plated	$6 00
No. 497—Nickel Plated	5.50

Weight 3½ Lbs. per String

30 Bells, 1¼ in. Diam. on Double and Stitched Glengarry Strap, with Ornaments inlaid between each Bell.

No. 1570—Silver White Finish; Weight 2½ Lbs. String	6 00

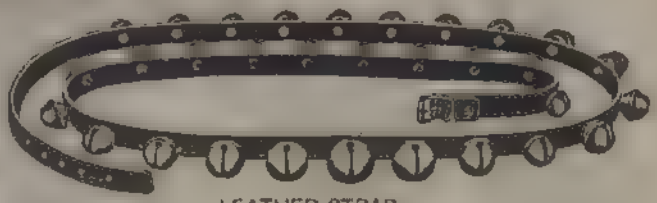
DOUBLE THROAT BELLS, CAST BELL METAL

Double Throat

Note—There is practically no difference in shape between Double Throat and Arctic Bells.

	Per String
No. 530—36 Nickel Plated Bells, 1¼ in Diam., on Polished Black Strap. Weight 2¾ Lbs. per String	$5 50

One String in a Package



LEATHER STRAP

Good Quality Black Polished Leather Strap, 7½ ft. Long, 1 in Wide. Nicely Finished Edges. Nickel Plated Buckle. Round Tinned Bells. Strongly Riveted to Strap; Uniform in Tone and can be heard some distance.

	Per String
No. 171—42 Bells, 1⅛ in. Diam.	$3 50
No. 178—30 Bells, 1⅜ in. Diam.	3 50

Weight 3¼ Lbs. per String

RIM BELLS, Riveted on Black Strap

Black Leather Strap, 7½ ft. Long, 1 in Wide; Bells are Strongly Riveted; Japanned Buckle, A Good Grade for Farmers, Loggers, etc.

Nickel Plated

	Per String
No. 694—31 Bells, Assorted Sizes, Twelve 1 in., Eight 1⅛ in., Four 1¼ in., Two 1⅜ in., Two 1½ in., Two 1⅝ in., One 1¾ in Diam.	$4 50

Weight 2¾ Lbs. per String

No. 693—25 Bells, Assorted Sizes, Ten 1 in., Six 1⅛ in., Two 1¼ in., Two 1⅜ in., Two 1½ in., Two 1⅝ in. and One 1¾ in. Diam.	3 80

Weight 2½ Lbs. per String

Silver White Finish

No. 684—25 Bells, Assorted Sizes, Ten 1 in., Six 1⅛ in., Two 1¼ in., Two 1⅜ in., Two 1½ in., Two 1⅝ in. and One 1¾ in. Diam.	3 85

Weight 2½ Lbs. per String

Tinned

No. 1718—31 Bells, Assorted Sizes, Twelve 1 in., Eight 1⅛ in., Four 1¼ in., Two 1⅜ in., Two 1½ in., Two 1⅝ in., and One 1¾ in. Diam.	3 00

Weight 2¾ Lbs. per String

No. 1717—25 Bells, Assorted Sizes, Ten 1 in., Six 1⅛ in., Two 1¼ in., Two 1⅜ in., Two 1½ in., Two 1⅝ in., and One 1¾ in. Diam.	2 80

Weight 2¼ Lbs. per String

No. 639—19 Bells, Assorted Sizes, Eight 1 in., Two 1⅛ in., Two 1¼ in., Two 1⅜ in., Two 1½ in., Two 1⅝ in., and One 1¾ in Diam.	2 50

Weight 2¼ Lbs. per String

No. 0639—19 Bells, Assorted Sizes, Eight 1⅛ in., Four 1¼ in., Two 1⅜ in., Two 1½ in., Two 1⅝ in., and One 1¾ in. Diam., Web Covered Strap	2 50

Weight 2 Lbs. per String

Arctic

Dexter

ARCTIC BELLS, Formed from Wrought Steel

Riveted on Polished Black Leather Strap, 7½ ft. Long, 1 in. Wide.

	Per String
No. 789—30 Nickel Plated Bells, 1⅛ in. Diam	$2 40
No. 802—30 Rolled Brass Plated Bells, 1⅛ in. Diam.	2 40

Weight 1¾ Lbs. per String

No. 1603—30 Nickel Plated Bells, 1¼ in. Diam	2 70
No. 831—30 Rolled Brass Plated Bells, 1¼ in. Diam.	2.70

Weight 2¼ Lbs. per String

25 Arctic Bells, Assorted Sizes, Eight 1 in., Six 1⅛ in., Four 1¼ in., Four 1⅜ in., Two 1½ in., One 1⅝ in. Diam.

No. 1605—Nickel Plated	$2 40
No. 1705—Rolled Brass	2 40

Weight 1¾ Lbs. per String

No. 1201—42 Rolled Nickel Plated Bells, 1¼ in. Diam.; Weight 2¾ Lbs. per String	3 20

DEXTER BELLS, Formed from Wrought Steel

Riveted on Polished Black Leather Strap, 7½ ft. Long, 1 in. Wide

	Per String
No. 839—30 Rolled Nickel Plated Bells 1⅜ in. Diam.; Weight 1½ Lbs. per String	$2 40

One String in a Package

SOLDER

HALF AND HALF

A Low Melting Solder, free from Antimony, flows freely; best for Roofers, Tinsmiths, Can Manufacturers, etc.

	Per Pound
XXXX, Warranted Strictly Half and Half; 50 Parts Tin to 50 Parts Lead	$..
XXX, Half and Half, 48 Parts Tin to 52 Parts Lead	....

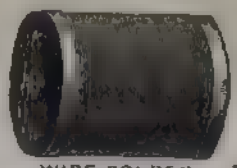
Size ⅛x1x12½ in.; Weight 1¾ Lbs. per Bar

STANDARD WIPING

For Roof Repairing, Wiping Joints and for bright, showy work in general use.

	Per Pound
XX, Size of Bar ⅛x1x12½ in.; Weight 2 Lbs. per Bar	$....

Note—Poor Solder weighs more than good Solder of equal bulk; a small amount of impurity raises the melting point enormously



WIRE SOLDER

	Per Pound
Stubs Gauge No. 10, 13-100 in., 45 Parts Tin to 55 Lead; Smooth, Uniform Composition and Size, for Use on Can Capping Machines, in Electrical Plants, etc.	$....

In 100 Lb. Reels

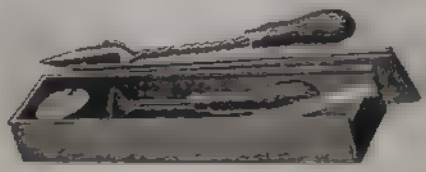
SOLDER

TINKERS' SOLDER

	Per Gross
6 in. Bars, for Home Use, Fine Quality, Free Flowing, Carries its own Flux and Salts; Fine for Repairing Pans, etc.	$12.00

One Gross in a Case; Wt. 33 Lbs. per Gross

SOLDERING SETS



GEM

LEADER

With one of these sets an inexperienced person, by following directions packed with each, can do all ordinary soldering of household utensils. Full Directions for Soldering with each Set.

	Per Doz. Sets
Set No. 6—Consists of 1 Soldering Copper, 10½ in. Long, with Plain Wood Handle; 8 in. Scraper, 1 Bar Solder, 1 Box Rosin; all in Neat Wooden Box, with Slide Cover	$7.80
Weight 12½ Lbs per Dozen Sets	
Set No. 7—Consists of 1 Soldering Copper, 11 in. Long, with Black Enameled Handle; 1 Scraper, 1 Box Rosin, 1 Piece of Wire Solder; all Packed in Neat Pasteboard Box	$4 20
Weight 3½ Lbs. per Dozen Sets	

Open Stock

SOLDERING COPPERS

Without Wood Handles, Drawn Copper, Hammer Shaped

SQUARE POINTED

						Per Pound
For General Use, All Sizes						$0 60
Wt. Lbs., Pair	1	1½	2	2½	3	4
Length, In.	11	12	13	14	15	15
Wt. Lbs., Pair	5	6	7	8	9	10
Length, In.	15	15	18	18	18	18

FLAT WEDGE POINTED

			Per Pound
For Boiler Bottoms, Roofing Seams, etc.			$0.60
Weight Lbs., Pair	4	5	6
Length, In.	13⅛	15⅛	16⅛

Open Stock

TINNERS' SCRAPERS

For Scraping articles to be repaired, removing Solder, etc.; Can be sharpened on Oil Stone.

	Per Dozen
No. 25—English File Steel, 8¾ in. Long; 2⅛ in. Blade, ⅝ in. Wide, Polished; Handle strongly fastened, Metal Ferrule	$3.00

Half Dozen in a Box; Weight 2 Lbs. per Dozen

MURIATIC ACID

Used as Soldering Flux on Galvanized Steel; also for Removing Stains from Brick Work, etc.

	Each
In 1 Gal. Stone Jugs	$1.90
In ½ Gal. Stone Jugs	1.00

Extra for Jugs

1 Gallon	$0.50
½ Gallon	.30

YELLOW PRUSSIATE OF POTASH

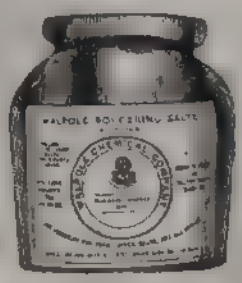
For Assaying Ore

	Per Pound
Commercial, Bulk, in Crystals	$0.75

CYANIDE OF POTASSIUM

	Per Pound
40 per cent Bulk, in Crystals, Used in Electro-Metallurgy and Photography	$1.20

SOLDERING SALTS



WALPOLE

Used in Soldering Tin, Galvanized Iron, Copper, Brass and other Metals; as a Flux to make Solder Flow.

	Per Dozen
2 Oz. Bottles	$2 00
½ Lb. Bottles	4.00
1 Lb. Bottles	7.00
	Each
5 Lb. Jars	$2.26

Open Stock

LEAD WIRE

DIAMOND LEAD WIRE

	Per Pound
Diam. 1/16 in.; Used principally by Marine Engineers for Testing Bearings, take cap off Journal, lay strips of Wire on Shaft, replace Cap and turn the Shafting; the Wire will show if Bearing is True and where it is otherwise; may also be used to fill up Inequalities of Bearings	$0 50

3 Lbs. on a Spool

PURE TIN

High Grade; for filling Fusible Boiler Plugs, etc., also used as an Alloy in place of Block Tin

	Per Pound
In 5 Lb. Bars	$....

BAR TIN

	Per Pound
In 1½ Lb. Bars, Size 13⅛x1½x⅝ In.	$....

PIG TIN

	Per Pound
About 110 Lbs. in a Pig	$....

Bar and Pig Tin are used in making Solder, Coating Metals for Rust prevention and as alloy with various softer metals

For Bar Lead and Pig Lead see Mining Department

ANTIMONY

Used in making Babbit Metal; Also for Hardening Type Metal and other Soft Compositions.

	Per Pound
Slabs of about 40 Lbs. Each	$....

SPELTER

For Brazing purposes, also called Slab Zinc.

	Per Pound
In 50 Lb. Slabs	$....

ROSIN

In Bulk

Used by Tinners, Roofers and Tinkers in Soldering Joints, as a Flux to make the Solder Flow, and by Varnish Makers as a Gum, in Cheap Varnishes

	Per Pound
Best Quality Lump Rosin	$0 10

About 500 Lbs. in a Steel Hooped Barrel

CRUCIBLES OR MELTING POTS

GRAPHITE, WITHOUT COVER

Made of Graphite; not affected by the heat of the melting metal

Nos.	8	10	12	14	16	18	20
Height, In.	7⅛	8	8	8⅛	8⅞	9⅝	10⅜
Diam. Top, In.	5¾	6⅛	6⅜	6¾	7	7⅜	7¾
Water Cap., Pints.	2½	3	4	5	6	7	8
Wt. Each, Lbs.	4⅞	7	7½	9	9⅝	11½	13¾
Each	$1.50	1 70	1 80	2.10	2.40	2 70	3.00

Nos.	25	30	35	40	50	60	80	100
Height, In.	10¼	11¼	11⅞	12¼	13½	14	15⅝	16
Diam. Top, In.	8	8⅜	9⅛	9⅜	10⅛	10⅝	11⅛	11⅞
Water Cap., Qts.	4½	5½	6½	8	11	12	14½	18½
Wt. Each, Lbs.	14½	17½	20⅝	22½	29¾	35	48	60
Each	$3 75	4.50	5.25	6.00	7.50	9.00	13.50	16.50

MORTARS AND PESTLES

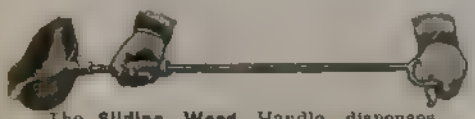
CAST IRON, GOBLET SHAPE

Extra Finely Polished Inside, Painted Outside. Used by Chemists, Druggists, Housekeepers, Metallurgists, etc., for the Grinding and Compounding of Minerals, Drugs, Herbs, Spices, etc.

Capacity	1 Pt.	1 Qt.	2 Qt.	4 Qt.	8 Qt.
Diam. at Top, In.	4¾	5¾	7	8¾	11¼
Depth, In.	3	3½	4½	6	7
Height, In.	4⅜	4⅝	5	7	8⅝
Wt. Pestle, Lbs.	1⅛	1¾	2-⅛	2-⅞	4-⅛
Wt. Both, Lbs.	3⅜	7	10	18	38
Each	$0.80	1.00	1.50	3.00	6.00

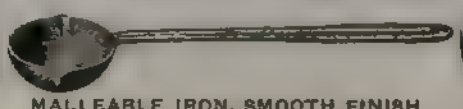
Open Stock

MELTING LADLES



The Sliding Wood Handle dispenses with the use of Piece of Waste when Metal is ready to pour. All parts exposed to fire are of Cast Iron.

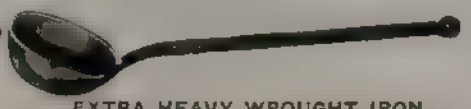
Length of Bowl, In.	8	10	12
Depth of Bowl, In.	2¾	3½	4
Length Handle, Ft.	2½	2¾	2¾
Weight Lbs., Each	8	13	17
Each	$5 00	6 00	7.00



MALLEABLE IRON, SMOOTH FINISH

Bowl and Handle in One Piece. Ring in End for Hanging.

Diam. Bowl, In.	3	4	5	6
Depth Bowl, In.	1⅝	1½	1¾	2⅛
Length Handle, In.	12	13	14	15
Weight Doz., Lbs.	11	15	24	36
Per Dozen	$3.15	5.00	8.50	10.75



EXTRA HEAVY WROUGHT IRON

Made from Best Charcoal Iron; Iron Handle, Strongly Welded to Bowl.

Diam. Bowl, In.	6	7	8	10
Depth Bowl, In.	2	2⅜	2½	3½
Length Handle, In.	22	26	29	37
Weight Doz., Lbs.	48	66	96	144
Per Dozen	$36.00	42.00	54.00	102.00

Open Stock

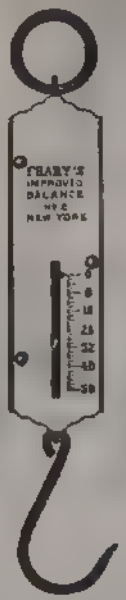
SPRING BALANCES

HEAVY

Brass Face, Black Japanned

Nos.	Capacity Lbs.	Wt. Doz. Lbs.	Per Dozen
40	25x ½	4	$ 4.00
70	50x1	17	8.00
1000	100x1	35	42.00
1250	125x1	45	48.00

25 to 50 Lb., 6 in a Box.; Larger, 3 in a Box



LIGHT

Tinned Ring and Hook

Nos.	Capacity, Lbs.	Wt. Doz., Lbs.	Per Dozen
2000	25x ½	2	$1.50
30	50x1	4	3.00

Half Dozen in a Box

ICE, STEEL KING

Brass Face, all Steel, no Castings to break, no Screws to loosen; Long and Distinct Dial. Spring cannot be strained beyond capacity. Easily adjusted. Japanned Case.

Nos.	Capacity Lbs.	Wt. Ea., Lbs.	Each
2200	200x5	4	$4.50
2300	300x5	4½	6.50

MINERS' SCALES

HAND

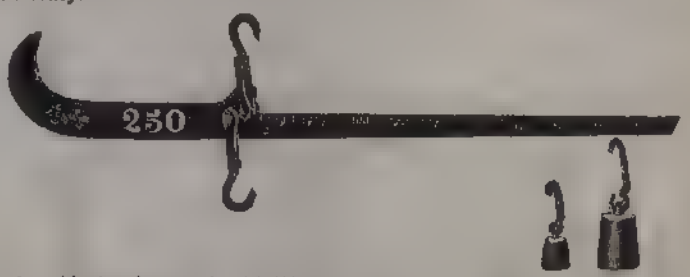
Used especially in Gold Mining and other Assaying

	Per Dozen
No. 44—4 Oz. Troy, 5¾ in. Brass Beam 2⅝ in. Brass Pans	$24.00
No. 46—6 Oz. Troy, 6¾ in. Brass Beam, 2⅞ in. Brass Pans	36 00

One in a Box; Weight 1 Lb. Each

SCALE BEAMS

Strong and Well made, will weigh to full capacity without Injury; Suitable for Warehouses, Stables, Farm and Lumber Camp use. They do not show fractions of a Pound, and are not intended for extreme accuracy.



Wrought Iron Hooks, Japanned, with White Figures and Bronzed Stripes, Notched Beam

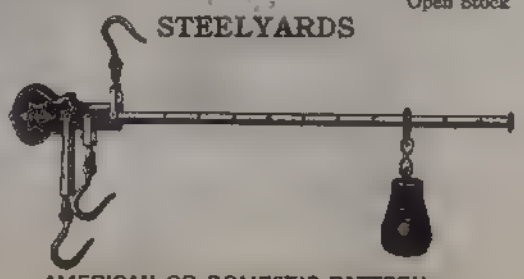
Capacity, Lbs.	100	150	200	250	300	360	400	500	600
Wt. Poises, Lbs.	1, 4	1, 4	1, 4	2, 8	2, 8	4, 8	3, 12	4, 16	8, 16
Wt. Complete, Lbs.	8	8	8½	13½	15¾	17¾	21½	28½	32
*Each	$3.00	3.00	3.20	3.80	4.20	5.00	5.80	7.00	8.00

EXTRA POISES

Wt. Lbs.	1	2	3	4	6	8	12	16
*Each	$0.50	.60	.80	1.00	1.40	1.70	2.20	3.00

Open Stock

STEELYARDS



AMERICAN OR DOMESTIC PATTERN

Balanced Head and Stop, Head and Poise Painted Black

Nos.	50	100	150	200
Capacity, Lbs.	50x1 Oz.	100x2 Oz.	150x¼ Oz.	200x¼ Oz.
Weight Dozen, Lbs.	30	50	60	90
*Per Dozen	$12.00	14.00	18.00	20.00

Half Dozen in a Box

TRUCKS

HOTEL

Rubber Tired, Half Ironed

For Hotel and Store Use and where quiet is desired. Heavy, Durable Tires, which cannot slip off.

Nos.	1R	2R
Length Handles, In.	48	52
Outside Width, In	19	20
Size Wheels, In.	7	8
Weight Each, Lbs.	43	60
Each	$15.00	18.50

WESTERN PATTERN WAREHOUSE

Steel Noses, Forged Axles, Turned Bearings; Strongly Bolted, Hardwood, Oiled and Varnished.

HALF IRONED (See cut)

Nos.	1W	2W	3W
Length Handles, In	48	52	56
Outside Width, In	19	20	22
Size Wheels, In.	7½x2	8½x2½	9½x2¾
Weight Each, Lbs.	43	60	77
Each	$7.00	9.00	13.00

FULL IRONED

Nos.	21W	22W	23W	24W
Lgth. Hdls., In.	48	52	56	60
Outside Width, In	19	20	22	24
Size Wheels, In.	7½x2	8½x2½	9½x2¾	10½x3
Wt. Ea., Lbs.	50	68	87	125
Each	$8.00	10.50	15.00	18.50

HANDY

Convenient and Cheap Truck, made for the occasional user for handling Boxes, Kegs, Bags, Packages, or Barrels.

Each

No. 441—Turned Bearings, Wheels Bored True to Center; Oak Frame, Wrought Iron Nose and Center Strap, Bent Handles; Length 48 in., Width at nose 13 in., Width at upper Bar 17 in., Size of Wheels 6x1½ in. $3 50

Weight 21 Lbs. Each

BAG

Each

No. 50—Bent Plow Handles, Heavy Cast Nose for Large Sacks; Length of Handles 42 in., Width at Nose 11 in., at Upper Cross Bar 20½ in.; 1 in. Steel Axle, Turned Bearings, Iron Wheel 7 in. Diam. $4 00

Weight 60 Lbs. Each

KEG OR BARBED WIRE

Each

No. 1K—Takes All Sizes up to an Apple Barrel; Easily Adjusted to Height from 9 to 30 in.; Length, Convenient and Reliable; Guards Protect Wheels from Load; Made of 1x¼ in. Steel with Wood Handle Grip; 45 in. Long Overall; 12 in. Wide, ½ in. Axle. $5 00

Weight 180 Lbs. per Dozen

All Above, Open Stock

BEN HUR, HANDY

A strong, Practical Light Weight Truck for use around Barn, House or Store. Constructed of Best Materials throughout. Body and Handle are one piece of Rock Elm; Iron Nose; Width at Nose 12½ in., Length Handle 40 in., Size of Wheels 4x1¾ in.; will carry 500 Lbs. with ease, yet is so light that it can be hung on wall out of way.

Each

No. 87—With Hard Maple Wheels $2 00
Weight 7 Lbs. Each

No. 89—With Iron Wheels 2 00
Weight 9 Lbs. Each

FANCY IRON PLANES

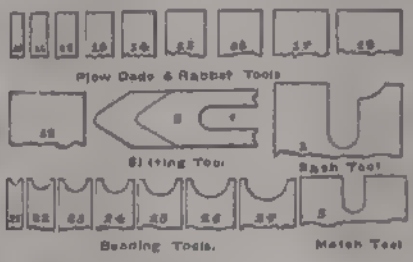
This plane is nickel plated; the 52 cutters are arranged in four separate cases, and the entire outfit is packed in a neat wooden box. Consists of a main stock (A) with two sets of transverse sliding arms, a depth gauge (F) adjusted by a screw, and a slitting cutter with stop. A sliding section (B) with a vertically adjustable bottom. The auxiliary center bottom (C) is to be placed in front of the cutter, as an extra support, or stop, when needed. This bottom is adjustable, both vertically and laterally. Fences are (D) and (E). Fence (D) has a lateral adjustment by means of a screw, for extra fine work.

STANLEY UNIVERSAL

2 Sash Tools
2 Match Tools
1 Slitting Tool
1 Fillister Tool
10 Plow and Dado Bits
9 Beading Tools
8 Fluting Tools
6 Pairs Hollows and Rounds
6 Pairs ¼ Hollows and Rounds
6 Reverse Ogee Bits
6 Roman Ogee Bits
6 Grecian Ogee Bits
6 Quarter Rounds, with Bead
12 Reed Tools with Reed

The fences can be used on either side of the plane and the rosewood guides can be tilted to any desired angle, up to 45 degrees, by loosening the screws on the face. Fence (E) can be reversed for Center Beading wide boards. An adjustable stop, to be used in beading the edges of matched boards, is inserted on left hand side of sliding Section (B). For a molding Plane, Match, Sash, Beading, Reeding, Fluting, Hollow, Round, Plow, Rabbet and Fillister Dado, Slitting and Chamfer Plane see following pages. Special Cutters will be made to order, or Blanks furnished from which any form required may be filed

No. 55—Nickel Plated, with 52 Tools, Bits, etc., this Tool in the hands of an ordinary mechanic can be used for all lines of work covered by a full assortment of Fancy Planes. Weight 15 Lbs. Each $18 00
Extra Spurs, for No. 55 Plane, Per Dozen 0 40



STANLEY ADJUSTABLE BEADING, RABBET AND MATCHING

No. 45—Nickel Plated, with 20 Tools, Bits, etc., Wt. 9 Lbs., Each $8 00
Per Dozen $0 40
Extra Spurs for No. 45 Plane . .

This Plane embraces (1) Reading and Center Beading Planes, (2) Rabbet and Fillister, (3) Dado, (4) Plow, (5) Matching Plane, (6) Sash Plane, and (7) a superior Slitting Plane

Each Plane has 7 Beading Tools, Sizes 1/8, 3/16, 1/4, 5/16, 3/8, 7/16 and 1/2 in. 10 Plow and Dado Bits, Sizes 1/8, 3/16, 1/4, 5/16, 3/8, 7/16, 1/2, 5/8, 3/4 and 7/8 in., a Slitting Blade, a Tonguing Tool and a Sash Tool

A Removable Rosewood Face is attached to the Fence.

HOLLOWS AND ROUNDS FOR No. 45 PLANE

Not Included with Regular Assortment Listed Above

Nos.	6	8	10	12
Width of Cutter, In . .	1/2	5/8	3/4	1
Works Circle, In	3/4	1	1 1/4	1 1/2
Per Pair	$1.50	1.50	1 50	1.50

Weight 2 Lbs. per Pair

COMBINED BEADING AND MATCHING

For either Ordinary or Center Beading; the Fence may be adjusted so that Center Beading can be done up to 5 in. from the edge of the board; has spurs for working across the grain. Each

No. 50—9½ in. Long, Nickel Plated Stock, Fence and Handle, Seven Polished Steel Beading Tools, Sizes 1/8, 3/16, 1/4, 5/16, 3/8, 7/16 and 1/2 in. and a Pair of ¼ in. Matching Tools, Weight 3 Lbs. Each . . $4 50

TRAUT ADJUSTABLE DADO, PLOW, ETC.

Each

No. 46—Nickel Plated, with 11 Tools, Dado, Fillister, Plow, etc; including Plow Bits, Slitting and Tonguing Tools $8 00

This Tool is accompanied by 8 Plow and Dado Bits, Sizes 1/8, 1/4, 3/16, 3/8, 1/2, 5/8, 3/4 and 1¼ in., a Fillister Cutter, a Slitting Tool and a Tonguing Tool. All except the Slitting Blade are secured in the main stock, on a skew. Weight 5½ Lbs. Each

TRAUT ADJUSTABLE DADO

This Tool has the same Stock and Arms as shown above (No. 46), but it can be used as a Dado only

Including Bits, Sizes 3/8, 1/2, 5/8, 3/4 and 1¼ in., and Slitting Tool

Each

No. 47—Nickel Plated, with 6 Tools, Bits, etc.; Weight 4 Lbs. $4 50

COMBINED CHUTE BOARD AND PLANE

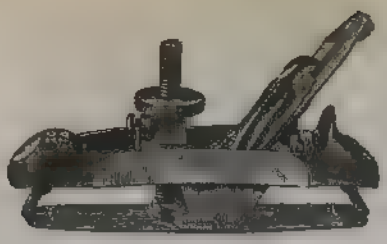
A very important Tool, especially for Cabinet Makers, Pattern Makers, Printers and Electrotypers; Board has ribbed Construction, an Adjustable Runway for Plane; Cutter set on a Skew, making a smooth keen cut; Indexed Swivel so it can be set at any angle from 0 to 90, Sliding Back and Back Clamp.

Each

No. 52—22 in. Long, Japanned Finish, Rosewood Handle, 2⅝ in. Cutter with Lateral and Endwise Adjustments, Weight 17½ Lbs. Each $10 00

STANLEY PLANES

CIRCULAR PLANES



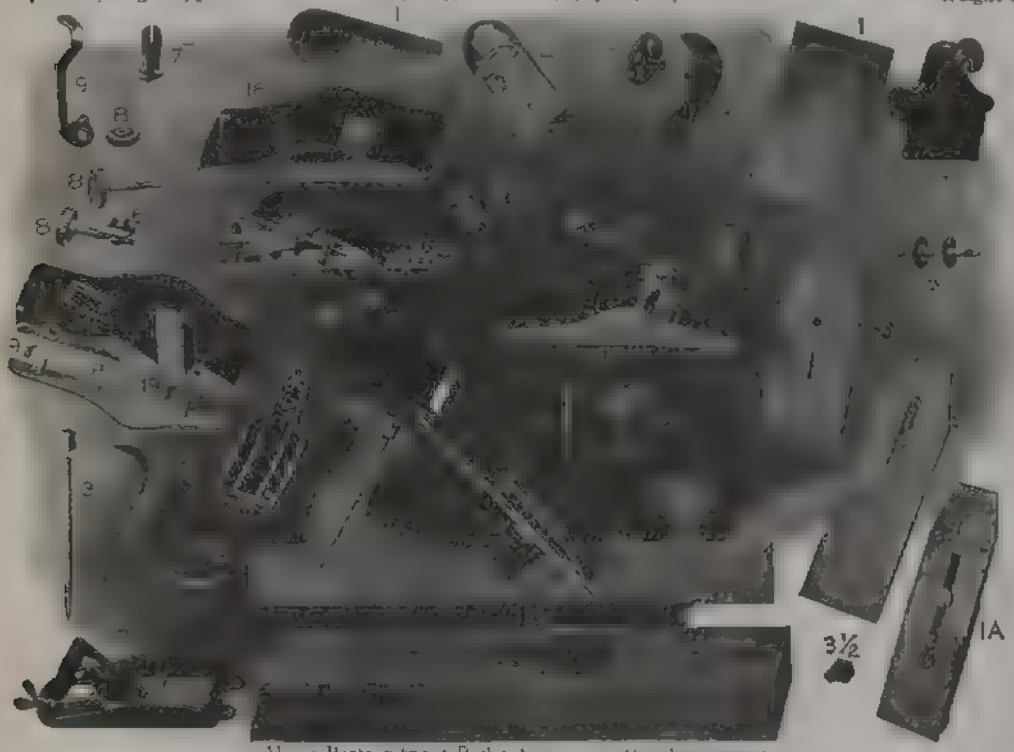
Flexible Polished Steel Face, which can be shaped to any Arc either Convex or Concave, for Planing over Rounded or Hollowed Surfaces

VICTOR — Each

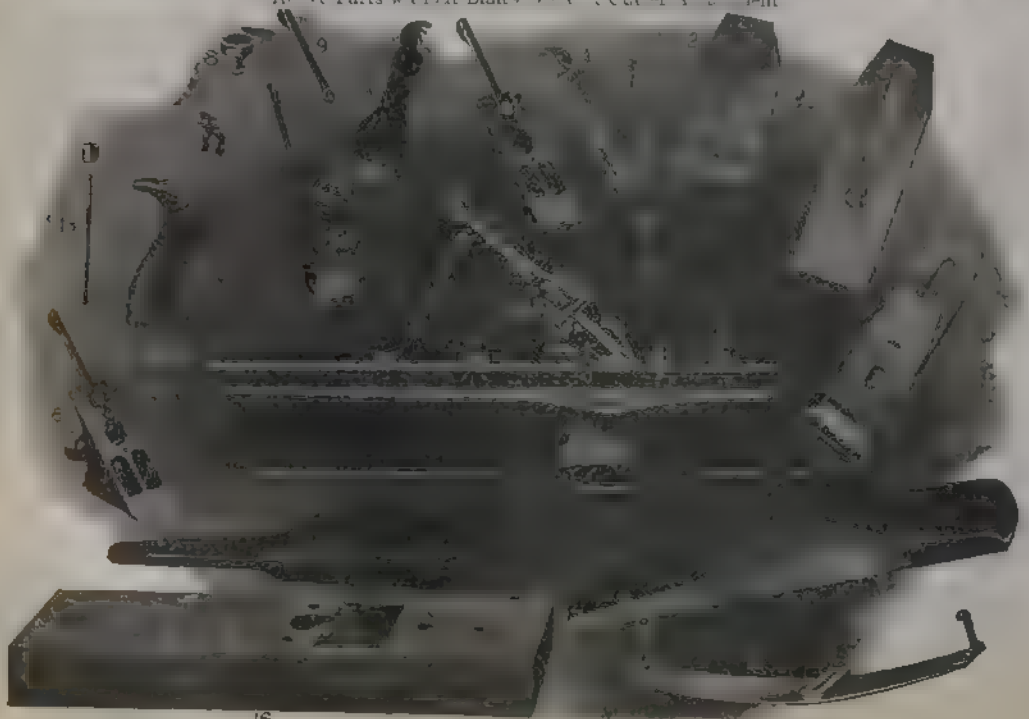
No. 20—9¼ in. Long, 1¾ in. Polished Steel Cutter, all Parts Nickel Plated, Specially designed with the object of eliminating any lost motion due to wear the ends of the face being fixed and the force applied at the center, great accuracy of adjustment is possible, weight 3¾ Lbs. Each..... $4.10

STANLEY — Each

No. 113—10¼ in. Long; 1¾ in. Cutter, by means of the Graduated Scale on the Gears, the Face can be set to Work an Arc of the same Circle, either Convex or Concave; Japanned Body and Handle Brass Adjusting Screw, all other Parts Polished . . $3 00
Weight 4 Lbs. Each



All the Parts without Bailey Style of Cutter Adjustment



16 Above Parts with Bailey Style of Cutter Adjustment

ILLUSTRATIONS OF PLANE PARTS

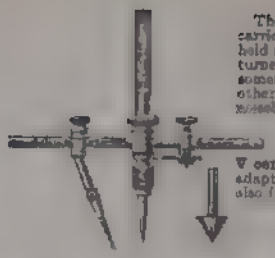
Nos.

1A—Double Cutter (Double Iron)
1 —Cutter (Plane Iron)
2 —Cutter Cap (Plane Iron Cap)
3 —Cutter Cap Screw
3½—Cutter Bolt and Nut
4 —Cutter Lever Cap
5 —Cutter Lever Cap Screw
6 —Cutter Seat Complete (Frog)
7 —Endwise Adjusting Lever
8 —Endwise Adjusting Lever Wheel —
9 —Lateral Adjusting Lever
10 —Seat Screws
11 —Plane Handle
12 —Plane Knob
13 —Plane Handle Bolt and Head
14 —Plane Knob Bolt and Head
15 —Plane Handle Screw
16 —Plane Bottom
17 —Plane Bottom Top Castings
18 —Detachable Side
19 —Detachable Side Screws
21 —Eccentric Plate and Pin
22 —Eccentric Plate Knob

In Ordering Parts, give Make of Plane, its Size, Number or Kind and Length, then the Piece Numbers as shown above

STARRETT MECHANICS' TOOLS

UNIVERSAL DIVIDERS



The adjustable **Scriber Holder** is reversible and carries either a fine tempered steel point or a pencil lead, held in a split socket by a knurled nut. With the holder turned outward, it is possible to work close to shoulders something that cannot be done by a similar tool of any other make, turned inward, the points may be brought exactly together, to scribe the smallest circle. With 4 in. beam 7¾ in. and under may be scribed. An **auxiliary beam** 12 in. long is furnished, with which a 25 in. circle may be drawn. The **V center point** may be substituted for the regular point, adapting the tool for scribing around a drilled hole. We also furnish a **pen attachment.**

		Per Set
Set No 66—Regular Outfit consists of Tool with 4 in. Beam and V Center Point; Weight 2 Oz.		$1 75
Set No. 88S—Complete Tool and all **Attachments**; Weight 4 Oz.		4 00

EXTRA PARTS

		Each
No 89A	**Steel Points**; Weight 1 Oz.	$0 10
No 89B	**Needle Points**; Weight 1 Oz.	15
No 89C	**Pen Attachment**; Weight 1 Oz.	1 00
No 89D	**Extra Straight Point and Socket**, Weight 1 Oz.	.50
No 89E	**Extra 12 in. Beam**, to scribe 25 in. Circle; Weight 4 Oz.	35
No 89H	**Extra Couplings**	35

BALL POINTS

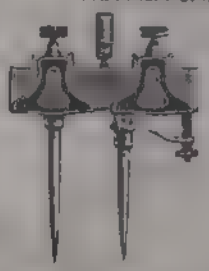
For use with Dividers Series Nos. 85 and 90

Shown on preceding page, and the New Set Trammel Points shown below

This attachment consists of four balls, of 1½ in., 1 in., ⅝ in. and ½ in. diameter respectively and a holder which fits either divider leg or trammel head. It is used to form a seat for the divider leg in describing circles around a hole.

		Per Set
Set No 85—Complete, 4 Balls and Holder, Weight 7 Oz.		$1 25
No. 85A—Balls		Each .25
No 85B—Holders		$0 26 .25

Trammel Points are used for striking larger circles than is possible with ordinary dividers



IMPROVED TRAMMEL POINTS

Made of bronze metal, nickel plated, with forged steel points, hardened

Either point can be removed and the pencil socket accompanying each pair put in its place. Light and durable.

		Per Set
Set No 80—Adjustable, for spring dividers with 3 in. Points; Weight 5 Oz.		$2 50
Set No 80C—Not Adjustable with 3 in. Points; Weight 5 Oz.		1 50
No. 80A—**Extra Points**, 3 in. Long; Weight 3 Oz.		.38

NEW SET TRAMMEL POINTS

Made of Cast Iron, Nickel Plated, with Forged Steel Points, Hardened

This cut shows the trammels fastened to a wooden beam, which may be any size from ⅝ to 1¼ in. wide, and of any thickness desired (requiring no fitting), giving stiffness according to the length, and adapting it for small or large work.

The auxiliaries to go with the tramme heads are as shown on left, viz: inside and outside caliper legs, an extra pair of long points, a set of four ball points with holder, with which one can scribe a circle from the center of any size up to 10 in. and under. A lead pencil may be used in place of either of the steel points. The spring device is adapted to take in all sizes of the steel points. The trammels are furnished with or without auxiliaries.

		Per Set
No. 89 Complete as shown. Weight 14½ Lbs.		$4 75
No 89A With one Pair of Points, Weight 10 Oz.		3 00
		Per Pair
No 89B—Small Caliper Legs; Weight 2 Oz.		$0 50
No 89C—Large Caliper Legs, Weight 6 Oz.		75
No 89D—Large Divider Points, Weight 5½ Oz.		50

For Prices on Balls and Holders, see Top of this Column

For other Trammel Points, see page 719.

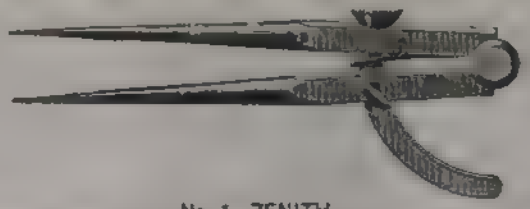
STARRETT DISPLAY CASES

REVOLVING DISPLAY CABINETS

This Handsome Display Case is Loaned to Dealers only, who are large Buyers of Starrett Tools. To be entitled to this Cabinet, the customer must buy $300.00 worth of Starrett Tools each year. The Cabinet is made of Hardwood and Finely Finished, and it shows the Tools to the best possible advantage.

WING OR COMPASS DIVIDERS

Used by Carpenters, Tinners, Pattern Makers, Machinists, etc., for Striking Circles of Different Diameters



No. 1—ZENITH

Best Quality Forged Steel, Polished, Brass Joint; Hardened Points; Spring Quadrant, Strong and Accurately Adjusted

Length, In.	6	6	7	8	9	10	12
Weight per Dozen, Lbs	1¾	3⅜	3⅝	4	7	7½	11
Per Dozen	$5.50	5.50	6.50	7.50	9.00	10.00	12.00

Half Dozen in a Box

EXTENSION

No. 9—SINGLE LEG

Has Tool Steel Hardened Points Polished, the Long Leg is Drop Forged Steel the other is Malleable Iron with Adjustable Point, which may be removed and a Pencil inserted

Length, In.	8	10
Will Scribe Circle, In.	22	30
Weight per Dozen, Lbs	5	6½
Per Dozen	$12.00	15.00

No. 19—DOUBLE LEG

Malleable Iron Legs, Hardened Tool Steel Points, Polished, either Point may be removed and a Pencil inserted in its place.

Length, In.	8	10
Will Scribe Circle, In.	30	35
Weight per Dozen, Lbs	5	7½
Per Dozen	$15.00	18.00

Half Dozen in a Box

CALIPERS

Used by Machinists, Carpenters, etc., the Outside for Measuring Shafting, etc., the Inside for measuring the Diameter of Holes, etc.

No. 16S—SELF-REGISTERING

For Inside and Outside measurements; made of Cast Steel, Nickel Plated, with Set Screw

Length, In.	3	4	5	6
Weight Dozen, Lbs.	¾	1	1½	2¼
Per Dozen	$7.50	9.00	10.50	12.00

No. 101—WING

For Outside; Best Cast Steel, Polished

Length, In.	6	8	10	12
Weight Dozen, Lbs	3½	4½	7¼	13½
Per Dozen	$7.00	9.00	11.00	13.00

No. 110—OUTSIDE

Length, In	3	4	5	6	8	10
Wt Doz, Lbs	½	¾	1	1¾	3¼	5
Per Dozen	$3.00	3.25	3.75	4.25	6.00	8.00

Made of Best Quality Cast Steel, Polished

No. 105—INSIDE

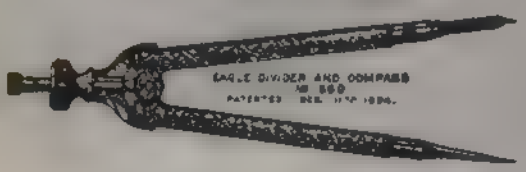
Length, In.	3	4	5	6	8	10
Wt Doz, Lbs	½	¾	1	1½	2½	4½
Per Dozen	$3.00	3.25	3.75	4.25	6.00	8.00

Half Dozen in a Box

No. 103 DOUBLE, INSIDE AND OUTSIDE

Length, In	3	4	5	6
Wt Doz, Lbs	1½	2¼	1	4½
Per Dozen	$3.50	4.25	5.00	6.00

COMPASSES AND DIVIDERS



EAGLE, COMBINED

For Architects, Draughtsmen, Artists, School Children and Mechanics; very Ingenious, yet Simple in Construction; serves equally well as Compass or Divider.

Per Dozen

No. 569—5½ in. Long; Nickel Plated Finish $4.50

Weight 1½ Lbs. per Dozen

One in a Box, with Nickel Case Containing Six Refills

GEM SCRIBERS

No. 2—Steel Polished 3½ in Long 1 in. Wide; Adjustable Foot $4.00

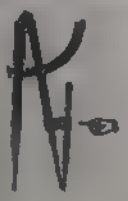
Per Doz.

One Dozen in a Box

Weight 1 Lb. per Dozen

PENCIL HOLDERS

Two Articles which are useful to all mechanics; especially to carpenters.



No. 8—Iron, Nickel Plated; can be attached to any Dividers $2.50

*Per Doz.

One Dozen on a Card

Two Cards in a Box

Weight 1 Lb. per Box

STEAM GAUGES

Non-Corrosive Movements, Springs made of carefully selected, Seamless Drawn Tubing, Silvered Brass Dials, with Figures and Letters cut deeply and filled with Black Enamel. Male Pipe Threads. Every Gauge used to ascertain Pressure of Steam should have a Siphon, which will furnish and fill the Tube Springs with water, to keep them cool.

SINGLE BOURBON SPRING

200 Lb. Dial; ¼ in. Pipe Threads

No. 200—Iron Case, Brass Rim

Diam. Dial, In.	3½	4½	5	6	8½
Wt. Each, Lbs.	2	3	3½	6	12
Each	$7 00	8 00	8 00	13 00	22 00

No. 201—Polished Brass Case

Diam. Dial, In.	6	6½	10	12
Wt. Each, Lbs.	7¼	10¼	17¼	28
Each	$16 00	30 00	40 00	75 00

80 Lb. Dial; ¼ in. Pipe Threads

No. 80—Iron Case, Brass Rim

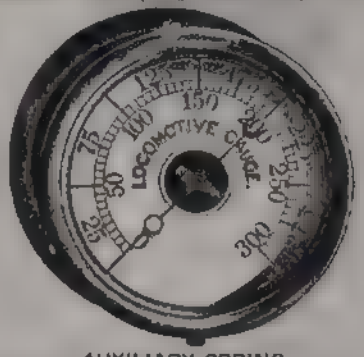
Diam. Dial, In.	4½	6
Wt. Each, Lbs.	3	6
Each	$8 00	13 00

160 Lb. Dial; ¼ in. Pipe Threads

No. 160—Iron Case, Brass Rim

Diam. Dial, In.	4½	6
Wt. Each, Lbs.	3	6
Each	$8 00	13 00

One in a Box



AUXILIARY SPRING

For High Pressure, will drain itself and is more reliable than Single Spring

¼ in. Pipe Threads

No. 300—300 Lb. Dial; Iron Case; Nickeled Rim

Diam. Dial, In.	4½	6	8½
Wt. Each, Lbs.	3	8	11½
Each	$10 20	15 50	25 75

No. 301—300 Lb. Dial, Polished Brass Case and Rim

Diam. of Dial, In.	6	8½
Wt. Each, Lbs.	7¾	11½
Each	$18 00	34 00

No. 302 500 Lb. Dial, Iron Case, Nickeled Rim

Diam. of Dial, In.	2½	6
Wt. Each, Lbs.	2	7½
Each	$6 00	15 50

One in a Box

FARM OR TRACTION ENGINE

For Heavy Duty

Each

No. 303—300 Lb. Dial, 4½ in. Diam.; Japanned Iron Case, Nickel Ring; no Flange on Back of Case; ¼ in. Pipe Threads $10 20

One in a Box

Weight 2¼ Lbs. Each

ALTITUDE GAUGES

No. 70—ALTITUDE GAUGES

Shows the height of a column of water in a reservoir or tank, the small red hand indicates the number of feet as set by the user. The large hand shows the actual height of water, enabling the operator to see instantly if the water column is of the required height.

Japanned Iron Case; Brass Rim, ¼ in. Pipe Threads

Diam. Dial, In.	4½	5
Dial Capacity, Ft.	70	70
Wt. Each, Lbs.	4	4½
Each	$12.00	12 00

One in a Box

STEAM GAUGES

No. 30—FOR HOUSE HEATING PLANTS

30 Lb. Dial; Iron Case; Brass Rim; ¼ in. Pipe Threads

Diam Dial, In.	3½	4½
Wt. Each, Lbs.	2¼	3⅝
Each	$7.00	8.00

One in a Box

VACUUM GAUGES

No. 31—VACUUM GAUGES

Used to determine the Number of Inches of Vacuum created in a System of Pipes, or in a Condenser, etc

30 Lb. Dial; Iron Case; Nickeled Rim; ¼ in. Pipe Threads

Diam. Dial, In.	5	6
Wt. Each, Lbs.	4	6
Each	$8 20	13 50

One in a Box

TEST GAUGES

No. 304—TEST GAUGES

Graduated to 300 Lbs. Pressure; ¼ in. Pipe Threads

Brass Case; Accurately and Carefully Adjusted; used for testing out Steam Gauges, etc.; Cock included.

Diam. Dial, In. 3	4½	6
Wt. Each, Lbs. 1¾	4	6
Each	$14.00	16.00	25.00

One in a Box

INSPECTORS' TEST PUMPS AND GAUGES

INSPECTORS' OUTFITS

Especially adapted for Government or Boiler Insurance Inspectors. Pump is strongly made and convenient to operate.

Gauge has only 3 in. Dial, is light and compact, and graduated to 300 Lbs. Pressure; All Nickel Plated.

Per Set

No. 305—Set consists of 1 Test Pump, 1 Test Gauge, 1 Small Union Cock, 2 Hexagon Couplings, 1 Hand Remover and One Gauge Hand Set. $46 00

One Set in a Morocco, Velvet-lined Case

Weight 8 Lbs. per Case

STEAM SPECIALTIES

STEAM GAUGE SIPHONS

Vertical

	Each
No. 1—Made of ¾ in. Iron Pipe; Length 7¾ in.; Threaded Both Ends; for all Gauges shown on page 2149	$0 50

Angle

No. 2—Same Size as No. 1	.50

Open Stock; Weight ¾ Lb. Each

STEAM GAUGE SIPHONS AND COCKS

Straight

	Each
No. 306—Brass; ¾ in. Pipe Threads, specially adapted for Portable and Traction Engines	$1 50

Open Stock; Weight ¾ Lb. Each

GAUGE HAND PULLERS

For Removing the Hand or Pointer of a Gauge

	Each
No. 307—For all Gauges up to 8½ in.	$1 50

Open Stock; Weight ¼ Lb. Each

FUSIBLE PLUGS

For use on Steam Boilers, when water gets below the safety point, the heat melts the filling and the escaping steam warns the engineer, Banca Tin Filling; Iron Pipe Threads

No. 1—BRASS

For Ordinary Use

Pipe Size, In..	¾	¾	1	1¼	1½	2
Wt. Each, Lbs.	⅛	⅛	⅜	1	1½	2⅝
Each	$0.60	.75	1 00	1 50	2.00	3.00

No. 2—MARINE

For Water Tube Boilers

Pipe Size, In.	1
Wt. Each, Lbs.	¾
Each	$1 50

No. 3—MARINE, REGISTERED

For Marine Boilers

Stamped according to the requirements of the Marine Service of the U. S. Government

Pipe Size, In.	¾	1
Length, In.	2½	3
Wt. Each, Lbs.	¾	1¼
Each	$1 25	1 50

Open Stock

WATER COLUMNS

WRIGHT, SAFETY

The first and most important object of a Safety Water Column is to give warning to those in charge of a boiler in case the water varies above or below the proper level when this happens the whistle sounds an alarm, continuing to blow until the Feed Water Supply has been regulated In the event of low water this Warning may be the means of preventing a boiler disaster. Its use is also economic resulting in a saving of fuel heat and money The durability of the boiler is increased as unsteady water causes a racking and straining which is destructive Gauge Cocks can be used on either side the improvements over other makes are: One Vertical instead of two horizontal valves, One Seamless Round Pipe instead of Two Long Ones with Seams all parts are attached to the Cap, Construction is extra heavy It is continually on the guard in the interests of proprietor, superintendent and engineer, attracting their attention to any emergency

Column and Whistle Only are included; Trimmings are Extra

Nos.	1W	5W
Steam and Water Connections, Inches	1	1¼
Blow-off, Inches	¾	¾
Water Gauge, Inches	½x14	¾x18
Gauge Glass, Inches	⅝x12	¾x16
Gauge Cock Centers, Inches	3	4
Gauge Cock, Inches	½	¼
Center of Water Connection to Top of Column, In.	18½	21
Diameter of Column, Inches	4½	5
Length Over-all, Inches	26	30
Size of Boiler, Inches	36 to 54	56 to 72
Variation between Alarms, Seconds	6	8
Weight Each, Lbs.	60	90
Each	$28 00	30 00

One Column in a Box

TRIMMINGS FOR WRIGHT SAFETY

Set Consists of 3 Ball Gauge Cocks and Water Gauge; the Steam Gauge and Drip Cock are not included

	Per Set
Set No. 1T—For No. 1W Column	$6 00
Set No. 5T—For No. 5W Column	8.00

One Set in a Package, Weight 8 Lbs. per Set

RELIANCE, SAFETY

These Columns have a Sediment Chamber, providing protection against dangers arising from sediment Valves are high above the water mark, and cannot become stopped up Combined High and Low Water Alarm Tapped for Gauge Cock Holes on either side Column only is furnished, Water Gauge and Gauge Cocks are extra

Nos.	1R	5R
Steam and Water Connections	1	1¼
Blow-off In	¾	¾
Water Gauge In	½x14	¾x18
Gauge Glass In	⅝x12	¾x16
Gauge Cock Centers, In	3	4
Gauge Cocks In	½	¾
Cent Water Connection to Top Col	18	20½
Diam Column In	3¾	4½
Length Over-all In	23¾	26½
Size Boiler, In	36 to 54	54 to 72
Var between Alarms, Sec	6	8
Weight Each, Lbs.	58	80
Each	$25 00	30 00

TRIMMINGS FOR RELIANCE SAFETY

Set Consists of 3 Ball Gauge Cocks and Water Gauge

	Per Set
Set No. 1RT—For No. 1R Column	$6 00
Set No. 5RT—For No. 5R Column	8 00

One Set in a Package; Weight 8 Lbs. per Set

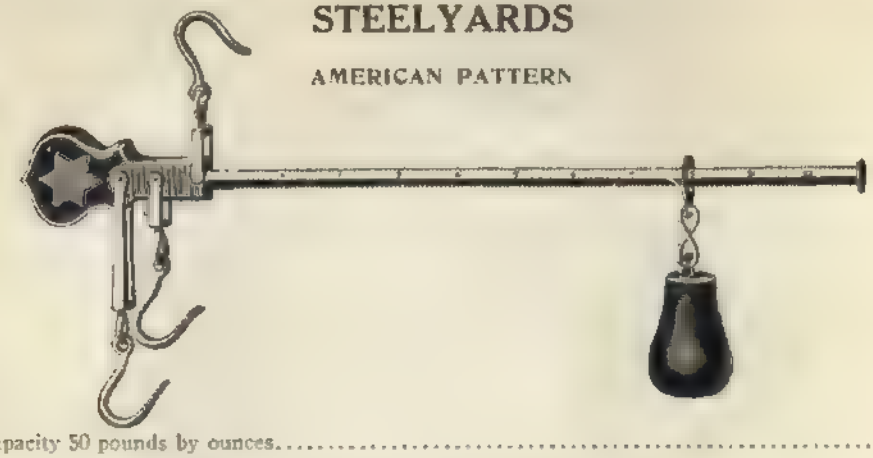
HEXAGON

Made of Cast Iron is connected to the Boiler at the Top and Bottom; has openings on the side for three Gauge Cocks. If the Water Glass Breaks or the Water Gauge cannot be used the height of water can be ascertained by opening the Cocks Column only is furnished; the Steam Gauge and Siphon, Water Gauge, 3 Gauge Cocks and Drip Cock are extra.

Nos.	2	3	4
Center to Center Boiler Con., In	12½	15	18
Center to Cen Water Gg Con., In	12½	14	18
Center to Center Wat Gg Cocks	3¾	4¼	4
Extreme Length In	16¾	19	22⅜
Tapped for Boiler Connections, In	¾	¾	1¼
Tapped for Water Gauge Con. In	¾	¾	¾
Tapped for Gauge Cocks In	½	½	¾
Top and Bottom Tapped, In.	1	1¼	1½
Weight Each, Lbs.	15	22	32
Each	$4 00	6 00	8 00

STEELYARDS

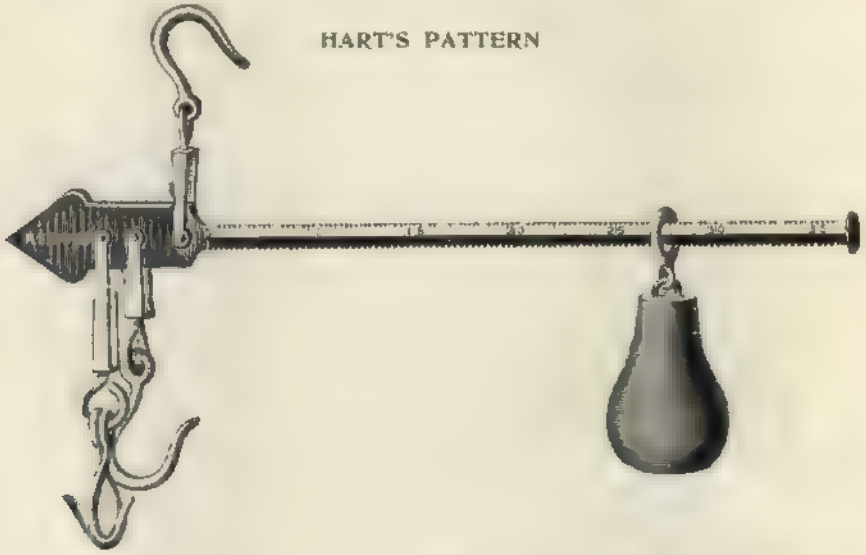
AMERICAN PATTERN



American pattern, capacity 50 pounds by ounces.....per dozen, $6.00

One half dozen in a box

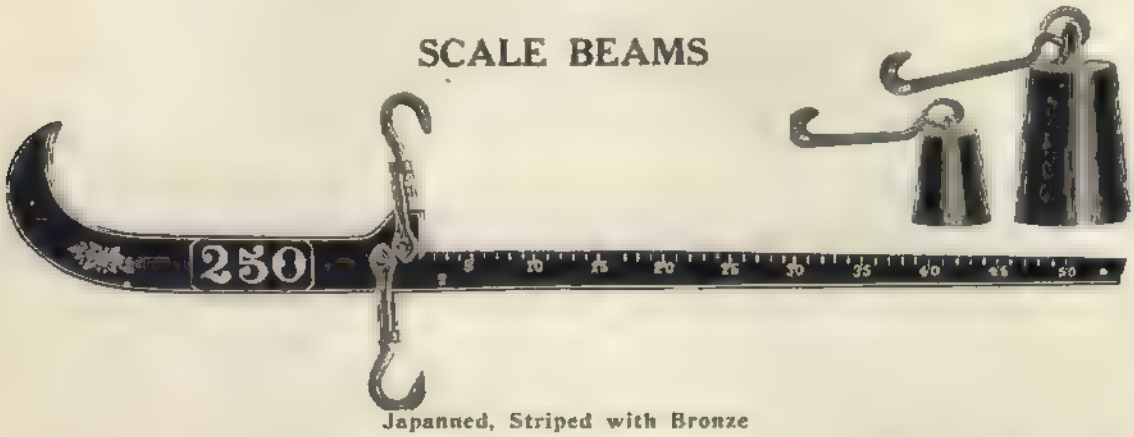
HART'S PATTERN



Hart's pattern, capacity.....	50 lbs. x 1 oz.	100 lbs. x 2 oz.	150 lbs x 4 oz.	200 lbs x 4 oz
Per dozen	$9.00	10.00	12 00	15.00

One half dozen in a box

SCALE BEAMS



Japanned, Striped with Bronze

Complete with Poises

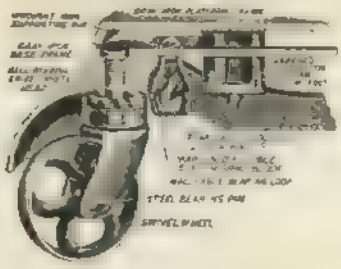
Capacity, lbs.	200	250	300	400	500
Each	$1.60	1 90	2 10	2 50	3 50

One in a package, six in a box

Separate Poises

Weight, lbs.	1	2	3	4	5	6	8	12	16
Each	$0 25	0.30	0.40	0.50	0.60	0.70	0.85	1.10	1.50

PORTABLE PLATFORM SCALES



The above sectional view shows how the swivel castor wheels are held in base frame of **Cyclo Scales;** also how scale levers are supported in hardened self adjusting loop bearings, as well as how the platform frame is supported on levers by hardened self adjusting steel bearing feet. The platform is held in perfect alignment with the lever pivots by improved check rod system.

CYCLO PLATFORM SCALES

These scales are constructed with two swivel or castor wheels at the front or beam end of scale frame, combined with two stationary wheels at rear end of frame. The front swivel wheels are supported on ball bearing swivel heads securely held in frame corners of frame or steel bearing plates. Scales are made of best materials and nicely finished. The beams and poises are of solid brass highly polished, carefully sealed and tested.

600 and 800 lb scales have beams graduated 50 lb by ½ lb., 1000 lb scales 100 lbs by ½ lb.

No.	Capacity	Single Beam	Double Beam
87 Cyclo	600 lbs.	$17.00	$20.00
88 Cyclo	800 lbs.	18.00	21.00
89 Cyclo	1000 lbs.	19.50	22.50

EN-CLO PLATFORM SCALES

With Wheels

Iron parts made of smooth gray iron, japanned. Pillars and caps are hardwood, painted and striped. Beams and poises are of solid brass highly polished. Beam and lever pivots are of hardened tool steel ground to a knife edge.

600 and 800 lb scales have beams graduated 50 lb by ¼ lb., 1000 lb scales 100 lbs by ½ lb.

No.	Capacity	Single Beam
81 En-clo	600 lbs.	$15.50
82 En-clo	800 lbs.	16.50
83 En-clo	1000 lbs.	17.50

One in a box

STEEL GAME TRAPS

GENUINE NEWHOUSE

Best Crucible Steel Springs
Special Mixture Norway Iron Stock

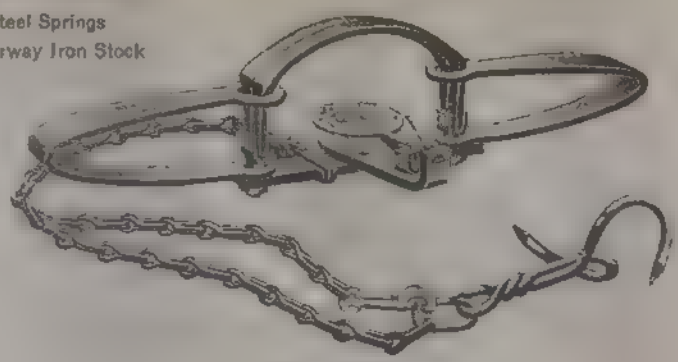
BEAVER TRAPS

Double Spring, with Chain

	Per Dozen
No. N14—6½ in. Spread of Jaws, Heavy Stiff Springs; Offset Jaws with Teeth	$[illegible]

Weight 40 Lbs. per Dozen

The Offset Jaws allow the Spri[illegible] to rise higher [illegible] leg is in the trap, and are furnished wi[illegible] the animal pulling his foot out.



WOLF TRAPS

Double Spring, with Chain and Drag

	Per Dozen
No. N41[illegible] Spread of Jaws, Heavy Stiff Springs; With Pronged [illegible] Heavy Steel Swivel Chain 5 ft. Long; Heavy Snap, [illegible] Will Hold 2,000 Lbs. Resistance	$40 00

[illegible] most and reliable Wolf Trap ever sold
Weight 96 Lbs. per Dozen

Open Stock

NEWHOUSE BEAR TRAPS

Double Spring, with Chain

	Per Dozen
No. N50—Small Bear, 9 in. Spread of Jaws	$8[illegible]
Weight 135 Lbs. per Dozen	
No. N5—Common Black Bear, 11¾ in. Spread of Jaws	120 00
Weight 228 Lbs. per Dozen	
No. N6—Grizzly Bear, 16 in. Spread of Jaws	280 00
Weight 504 Lbs. per Dozen	

These Traps give absolute satisfaction in their respective [illegible] The Largest Size is Strongest Trap [illegible] and the great Grizzly Bear of the Rocky Mountains; an Animal has never been known to get out of it, when once caught.

GAME TRAP SETTING CLAMPS

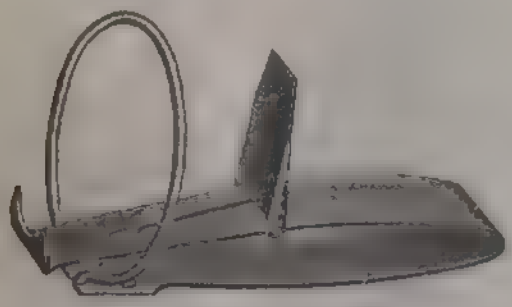
Malleable Iron, For Setting Traps. Use Two on a Trap

[illegible] spense with the inconveni[illegible] of Levers. R[illegible] g One to each Spring and turning Thumb Screw, [illegible] nd quickly pressed down in place, so the Pan may be safely [illegible] t. Handle is so shaped that a bar may be used when Springs [illegible] stuff

	Per Single Dozen
No. 250—Opens 2½ in., For Traps, Nos. 2, 2½, 3, 4, 14	$3 60
No. 450—Opens 4½ in. For Traps, Nos. 50, 4½ and 5	[illegible]
No. 600—Opens 6 [illegible] in.; For Traps, No. 6 Grizzly Bear	12 00

Weights 2½, 9 and 21 Lbs. per Dozen, Respectively

Open Stock

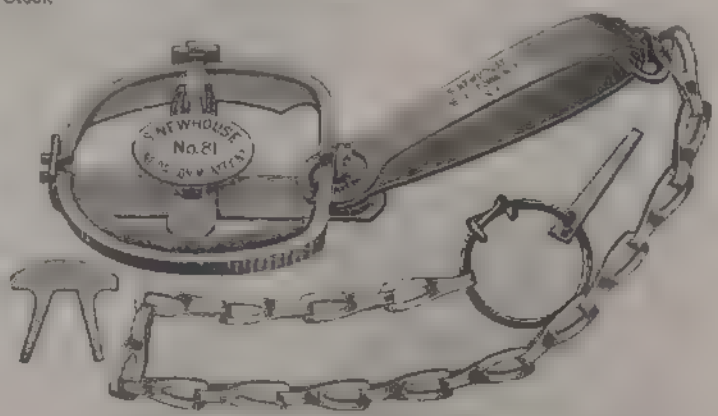


NEWHOUSE GOPHER TRAPS

The Method of setting the Newhouse Gopher Trap is very simple and convenient, and adds materially to the satisfaction of the user.

	Per Dozen
No. 25 [illegible] Size, Flat Steel Spring, Highly Tempered and Powerful, [illegible] Fully Warranted	$4 17

One Dozen in a Box, Weight 2¾ Lbs. per Dozen



GENUINE NEWHOUSE

Occasionally animals free themselves from traps by gnawing their legs off just below the trap jaws, where the flesh is numb from pressure.

Noting the webbed jaws as illustrated it is plain the animal can only gnaw off its leg at a point quite a distance below the meeting edges.

	Per Dozen
No. N81—For Muskrats, Skunks, etc., 4 in. spread of jaws, single spring; with chain, Weight 10 Lbs. per Dozen	$5 50

HOW TRAPS ARE PACKED—[illegible]

Size of Trap	0	1	1½	2	2½	3	4	4¼	5
Newhouse and Victor [illegible]	30 to 55	25 to 38	15 to 25	10 to 15	8 to 12	6 to 10	5 to 8	2½	1
[illegible] Box or bbl.	40 to 60	30 to 40	25 to 30	20 to 25	15 to 20	10 to 15	8 to 12		

STEEL GAME TRAPS

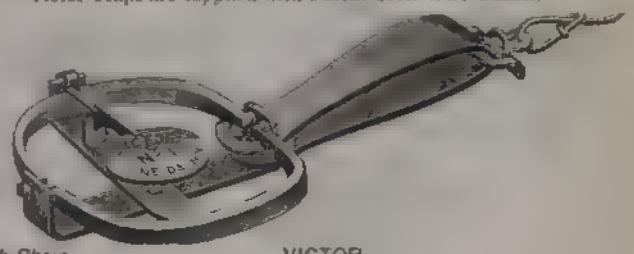
GENUINE NEWHOUSE, HIGHEST GRADE

These Professional Trappers' Traps are made of the best Crucible Steel Springs and the Steel is a special Mixture of Norway Iron. The Springs are put through three different tests and all other parts are tested and inspected before leaving factory. Guaranteed absolutely against any defects. Newhouse Traps are fitted with American and Weldless Coil Chains.

VICTOR

A little less expensive than the Newhouse, these are the best Traps to be had at the price. The Professional Trapper will use the Newhouse, but Farmers and Amateur Trappers who find a cheaper Trap answers their purpose are satisfied with the Victor.

Victor Traps are supplied with Patent Steel Wire Chains.

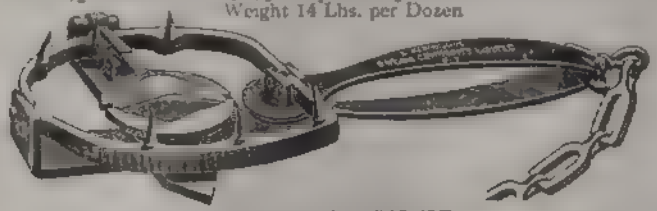


GENUINE NEWHOUSE — Single Spring, with Chain

	Per Dozen
No. N0—Rat and Gopher, 4 in. Spread of Jaws. Weight 6½ Lbs. per Dozen	$4 25
No. N1—Muskrat, Skunks, etc., 4 in. Spread of Jaws. Weight 9¼ Lbs. per Dozen	5 00
No. N1½—Mink and Fox, 4¾ in. Spread of Jaws. Weight 14 Lbs. per Dozen	7 50

VICTOR — Single Spring, with Chain

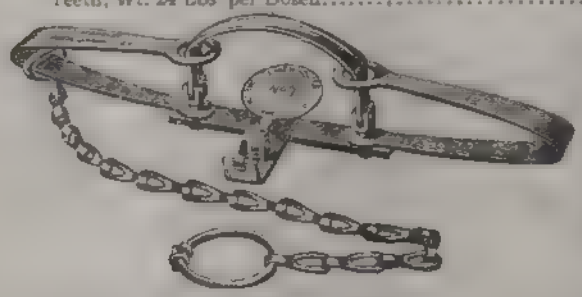
	Per Dozen
No. V0—Rat and Gopher, [illegible] in. Spread of Jaws. Weight 5 Lbs. per Dozen	$4 25
No. V1—Muskrats, Skunks, etc., 4 in. Spread of Jaws. Weight 7 Lbs., per Dozen	5 00
No. V1½—Mink and Fox, 4¾ in. Spread of Jaws. Weight 11 Lbs. per Dozen	7 50



GENUINE NEWHOUSE — Single Spring, with Chain

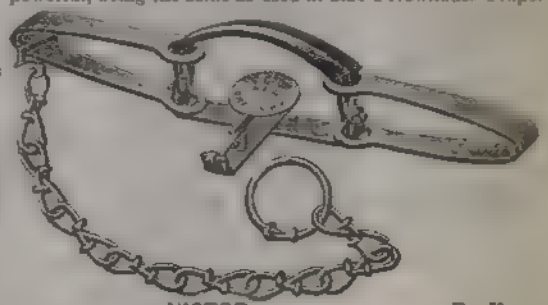
	Per Dozen
No. N2½—Extra Strong Spring, with Chain, Heavy Jaws with Teeth, 5½ in. Spread of Jaws, extra heavy Rear Guard Teeth; Wt. 24 Lbs. per Dozen	$16 50

The No. 2½ Trap is used more especially for catching Otter on their slides; for this purpose a thin, raised plate of steel is adjusted to the Pan; so that, when the Trap is set, the Plate will be a trifle higher than the teeth on the jaws. The raised Plate can be readily detached if desired, making the Trap one of general utility. The jaws of the teeth are very strong. The Spring is very powerful, being the same as used in Size 4 Newhouse Traps.



No. 3 is a very Powerful Trap and will hold almost any game smaller than Bears or Timber Wolfs.

No. 4 is the regular form of Beaver Trap, a favorite with hunters and trappers in the Northwest and Canada. It is also used extensively by western Stock Raisers for trapping Coyotes and small Wolves.



Double Spring, with Chain

GENUINE NEWHOUSE

	Per Dozen
No. N2—Fox, 4⅛ in. Spread of Jaws. Weight 18 Lbs. per Dozen	$10.50
No. N3—Otter, 5½ in. Spread of Jaws. Weight 28 Lbs. per Dozen	14 00
No. N4—Beaver, 6½ in. Spread of Jaws. Weight 35 Lbs. per Dozen	16.50

VICTOR

	Per Dozen
No. V2—Fox, 4⅛ in. Spread of Jaws. Weight 14 Lbs. per Dozen	$10 50
No. V3—Otter, 5½ in. Spread of Jaws. Weight 21 Lbs. per Dozen	14 00
No. V4—Beaver, 6½ in. Spread of Jaws. Weight 25 Lbs. per Dozen	16 50

JUMP PATTERN

With Chain

These Traps are light [illegible] for Fur Animals, they lie very flat and are easily secreted in the runways of animals. The Jaws have full wide meeting faces which are much less liable to break the animal's leg.

	Per Dozen
No. J0—Rat and Gopher, 3⅛ in. Spread of Jaws; Weight 4¼ Lbs. per Dozen	$4 25
No. J1—Muskrat, 4¾ in. Spread of Jaws. Weight 6¼ Lbs. per Dozen	5 00
No. J1½—Mink, [illegible] in. Spread of Jaws. Weight [illegible] Lbs. per Dozen	7 50
No. J3—Fox or Otter, 6⅛ in. Spread of Jaws; Weight 16 Lbs. per Dozen	$14 00
No. J4—Otter or Wildcat, [illegible] in. Spread of Jaws. Weight [illegible] Lbs. per Dozen	16 50
No. J2—Coon, Mink or Skunk, 5½ in. Spread of Jaws. Weight [illegible] Lbs. per Dozen	10 50

All Above, Open Stock

ICE TOOLS

HAND ICE TONGS

All Steel, 2 Link Chain Handles

No. 1. Inches	12	14	17
Per pair	$1.15	1.20	1.25

HAND ICE TONGS

Iron, Chilled Points One Link

No. 3. Inches	12	14	17
Per pair	$0.75	0 80	0.85

FAMILY ICE TONGS

No. 112. Plain handle, double joint, per dozen.... ..$3.50

HEAVY HOISTING TONGS

No. 8. Very heavy, claw points, each $3 60

These tongs will take any size cake of ice and are used in raising ice to platform or run.

STEEL ICE HOOKS

Length of handle, feet	5	6	10
No. 80. Per dozen	$10 50	12 00	13.50

WAGON OR HAND ICE SAWS

Iron Handle

Inches	26	*30
Per dozen	$21 00	23.00

*Not carried in stock

POND ICE SAWS

Price Without Tiller

Length, feet	4	4	5
8 inch Butt, 6 inch point, No. 11 gauge	each $4 00	4 50	5 00
7 inch Butt, 5 inch point, No. 11 gauge	each 3 60	4 05	4 50
Tiller Handles, extra			each $1 25

HANGERS

Nos. 10 to 90

DUPLEX JOIST HANGERS

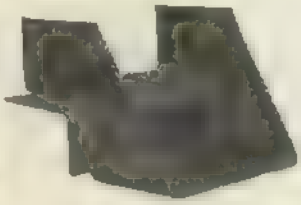
No.	To Carry Joist	Each
10	2 x 6 to 2 x 10	$0 20
14	2 x12 to 2 x16	30
15	3 x 6 to 3 x10	30
18	2½ x 6 to 2½ x10	40
20	4 x 6 to 4 x10	35
21	3 x12 to 3 x14	45
21X	3 x16 to 3 x20	50
28	4 x12 to 4 x14	60
28X	4 x16 to 4 x20	.70
53	5 x 8 to 5 x16	.75
16	6 x 6 to 6 x 9	.50
60	6 x10 to 6 x12	.80
60X	6 x14 to 6 x16	1 00
80	8 x 8 to 8 x12	1 00
90	8 x16 to 8 x18	1 [illegible]

Nos. 100 to 280

DUPLEX WALL HANGERS

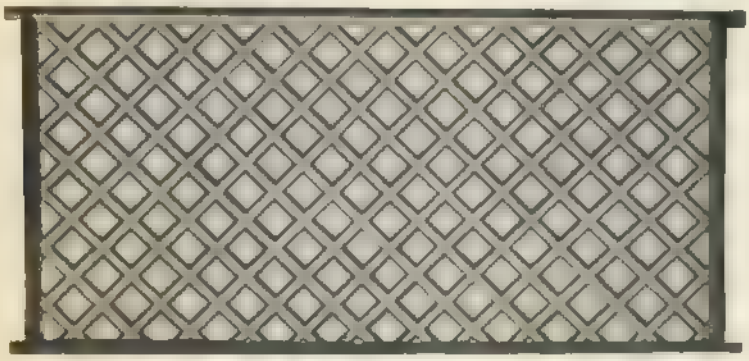
No.	For [illegible] Joist	For [illegible] Joist	Each
100	2x 6t	2x [illegible]	$0 25
140	2x14t	2x18	40
150	3x 6t	3x12	35
210	3x14t	3x [illegible]	55
200	4x 6	4x20	55
280	4x12t	4x28	75

No.	For [illegible] Joist	For [illegible] Joist	Each
500	5x [illegible]	5x 6	$1 [illegible]
600	6x [illegible]	6x12	1 25
800	8x [illegible]	8x14	1 [illegible]
1000	10x2 [illegible]	12x12	1 60



Nos. 500 to 1000

VENTILATING GRATES



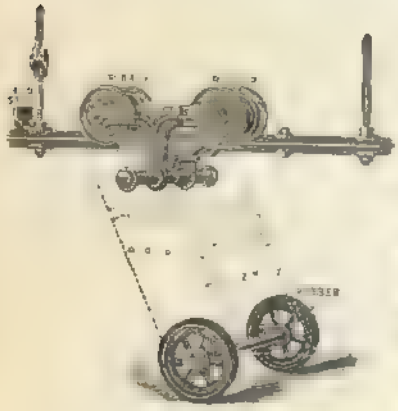
WONDER

Made of new iron, smooth, neat, and well painted with air drying Japan.

Size of Openings	Length of Bars	Per Dozen
6	8	$1 [illegible]
6	12	1 40
8	8	1 35
8	10	1 40
8	12	1 [illegible]
8	16	2 30
8	20	3 30
10	12	2 40
10	14	2 10
10	16	3 15
12	14	3 75
12	18	4 [illegible]
12	24	5 [illegible]

[illegible]

STORE LADDERS



*THE MYERS CUSHION TIRE

Ladder and trolley, complete, each. . $20 [illegible]
Track complete, with hangers, per foot..... .30

The ladder is constructed of the best clear Georgia pine, nicely finished and varnished, showing the natural wood. Has open panel sides, 5 inches wide. Steps have 5½ inch tread. The ladder measures 12 inches [illegible]

[illegible] track is of steel angle steel rail, which is very [illegible] and strong and is suspended from ceiling [illegible] means of lag screws or bar [illegible] right, or by [illegible] plates and wood screws.

The trolley is malt [illegible] bushing, fitted with turned steel bearings and 3 inch [illegible] rubber wheels, turned [illegible] and fitted with special rubber tires.

The [illegible] are 3 inches in diameter, [illegible] of metal sides will rubber cushion tires [illegible] in such a [illegible] as to be impossible to get off or come [illegible]. These wheels are placed on a steel axle

Directions for Fitting Store Ladder

Give the exact height of the ceiling and the length of each track, and all the fitting will be done at the factory. If the height of the ceiling varies, give the height of ceiling at each end and center of each [illegible] track.

Cut illustrates a view of the Myers Cushion Tire Store Ladder, showing the track, hanging hook, end stop, upper and lower trolleys, all complete mounted ready for use.

*Not carried in stock, but supplied by direct shipment from factory

Stewart
Delivery Cars

Chassis, $1650

Stock Bodies

Panel Body - - -	$150
Express Body with Top	125
Open Box Body with Cape Top - - -	125
Special Express - -	125
Undertakers' - - -	550

Stewart Panel Body; Capacity, 1500 Pounds

Announcement

A Big, New, High-Grade Delivery Car Built by Experienced Makers and Selling at a Moderate Price

We announce the new Stewart delivery car—big, roomy, up-to-date, high-grade in construction and with more desirable, standard features than any other ever offered at the price. A car manufactured by a well-organized, amply financed, thoroughly experienced company.

Note these striking features of this new car, every-one of well-proven merit:

Continental Motor—Long stroke, 30 H. P., 3¾" bore x 5¼" stroke, three bearing crankshaft, cylinders en bloc.

Brown-Lipe Transmission — Selective sliding gear type, recognized everywhere as standard.

Timken Axles (Front and Rear)—Timken roller bearings are used throughout running gear and transmission, everywhere but in the motor.

All other mechanical features of equally well-recognized quality

Big Tires—34" x 4" front, 35" x 4½" rear.

Bodies of New Design—Larger than usual, 7 foot loading space; wheelbase, 126 inches.

Complications Eliminated Single ignition (magneto). No spark lever. No batteries, timer, coil, etc. No belt-driven fan. Radiator at dash.

The Men Behind

This splendid car is built by men experienced in the delivery car business. T. R. Lippard, president and manager of the Stewart Motor Corporation, was formerly vice-president and manager of the Lippard-Stewart Motor Car Co. He has had exceptional experience in the manufacture and selling of motor cars—both pleasure and commercial. He is also well equipped with thorough training in other lines of manufacturing.

R. G. Stewart, designer of the Stewart delivery car and vice-president of the corporation, is an engineer of widely recognized ability. He was the designer of the Lippard-Stewart car. Prior to this he was connected for years with such concerns as the Olds Motor Works, the Franklin Automobile Company and others. The Stewart car, his latest achievement, represents the product of this wide experience.

Messrs. Lippard and Stewart were the first to put on the market a thoroughly high-grade scientifically perfected light delivery car at a medium price—in fact, at any price.

The Stewart Motor Corporation, though newly organized, is manned in every department by well trained, competent men. It has started into business on a greatly enlarged scale—with ample factory equipment and facilities for turning out a large output.

Dealers Wanted

Big successes are being made and will continue to be made in the commercial car field. It offers the greatest money-making possibilities in the motor car business. No seasons. No trading. No yearly models. No expensive establishment. You can sell a merchant from three to ten delivery cars with no more effort than it takes to sell one touring car.

Here is a delivery car—the Stewart—that offers unequalled selling possibilities for live dealers. Never before has there been such a demand on the part of merchants for a high-grade scientifically designed delivery car.

They are through experimenting with converted touring cars. They have learned that only well-made, high-grade delivery cars will stand up. They are already convinced of the value of motor delivery. Now they want to find the right car.

The Stewart ideally fills this waiting demand.

We want live dealers—lots of them. We have a proposition that will make money for you. Our terms are most attractive. Our cars are easy to sell.

Write for our catalog and dealership proposition.

Stewart Motor Corporation, Buffalo, N.Y.

T. R. Lippard, Pres.-Mgr., R. G. Stewart, V.-Pres.-Chief Eng., R. P. Lentz, Sec.-Treas.; R. W. Ingersoll, Sales Mgr.

Separate from and having no connection with the Lippard-Stewart Motor Car Company.

STOWELL SLING HAY CARRIERS

STEEL TRACK, SWIVEL SLING CARRIERS

Distinctive Points Peculiar to the Stowell Line; Each Point has Special Merit

The Wheels in all Stowell Hay Carriers run on Turned Steel Pins, and the Pulleys are provided with Roller Bearings, running on Cold Rolled Steel Pins.

The Track is made of Solid Steel Rail standing by actual test, nearly double as much strain as an ordinary Angle Steel Track.

The Hanger Hooks wedge solidly to the Rail and are easily attached or detached at any point along the Rail even after the Rail is up in place. They are not attached with Bolts. The different sections of Rail are spliced together with Strong Splice Clamps, which hold the Rail securely without the aid of any Bolts through the rail.

The End Stops are made of malleable iron bolted to the Rail.

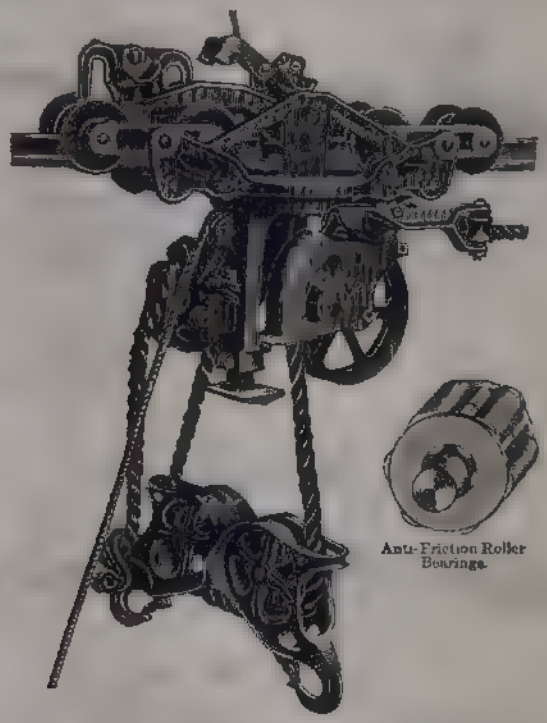
The Trip Block, is bolted solidly on two special Hangers above the Track next to the Rafter Brackets, thus taking all the end strain off the Track while raising the load. It is underneath one set of Rafters, with Brackets and Special Hooks on each side of the Rafter. Part of the strain is thrown upon the next Rafter at each side, so that the strain of raising the load comes upon four Hangers and Brackets and upon three sets of Rafters.

The Trip Block, being above the track, allows the ends of the Carrier to be braced together close up to the Track, absolutely preventing spreading from the Rail.

The Same Trip Block for Steel Track may be used for either Sling or Fork Carrier, on the same track, without any adjustment whatever; simply slide the Fork Carrier to one end of the barn and put Block in front of it.

Carrier is made of Malleable Iron and Finished in a Rich Aluminum Bronze, which is baked on to prevent peeling; All Lettering is done in Gold Bronze.

Only Center Trip Slings Can be Used with These Carriers



Anti-Friction Roller Bearings.

EIGHT WHEEL OSCILLATING TRUCKS

EVANS SPECIAL IMPROVED CROSS DRAFT DIRECT ACTION PATTERN

Perfection in Design, Simple in Construction; Closely coupled to track; Load suspended closer to track than any other Sling carrier

	Each
No. 10—With Right Angle Pulleys which deposit the Hay at Right Angles to the track	$13 00

Weight 70 Lbs. Each

Note.—The same type of car can be furnished for operating with Wire Rope; Prices on request.

MATERIAL REQUIRED FOR A STEEL TRACK OUTFIT FOR DIFFERENT LENGTH BARNS

Following is a List of Material needed for Fitting up a Fork Outfit. For Hay taken in at end of Barn—1 Fork Carrier, Track the length of barn, Hangers and Brackets for each pair of Rafters (about every 2 feet and 1 over), Track Extension Fixtures No. 021¼, 3 Pulleys, 2 Pulley Hooks, 1 Pulley Bracket, 1 Harpoon or Grapple Fork, 1 Swivel Rope Hitch; Green Strand Draft Rope, equal to the length of track, three times the distance from floor to track and one-half the width of barn. Trip Rope ⅜ in., equal to length and height of barn; Reverse Rope, ⅜ in. equal to length of barn.

For Barn having Center Drive, same as above, except 5 Pulleys and 6 Pulley Hooks would be required, and the Track Extension Figures and Pulley Bracket would not be necessary.

For Sling Outfit, substitute Sling Carrier for Fork Carrier, and 2 Slings for Triple Draft or 3 Slings for Double Draft Carrier in place of Fork. Draft Rope equal to length of track, four times the distance from floor to track, one-half the width of the barn, plus 15 feet.

For 40 ft. Barn, use about 110 ft. Draft, 50 ft. Check, 40 ft. Reverse
For 50 ft. Barn, use about 130 ft. Draft, 60 ft. Check, 50 ft. Reverse
For 60 ft. Barn, use about 160 ft. Draft, 70 ft. Check, 60 ft. Reverse

Be sure to drag rope thoroughly before Threading Carrier, to take twist of kinks out.

HAY KNIVES

No. 1—NEYS SCALLOPED, SICKLE EDGE BLADE

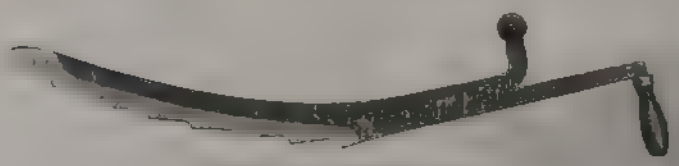
Will cut loose or packed Hay, Straw, Pea Vines, Clover, etc., from Stack, Mow or Bale with greater ease and rapidity than any other style; Handles can be placed on either side for Right or Left Handed Operator and can be adjusted to any angle to clear Hands from the stack.

Handle and Knife Bar made of Best Malleable Iron; Four High Grade Too. Steel Serrated Blades with Waving Edge are riveted to Knife Bar; rapid cutting and not easily dulled; Finished in Green, with Cherry Stained Wood Handles.

Per Dozen

18 in. Cutting Edge; 35 in. Over-all. $18.00

One Dozen in a Box; Weight 75 Lbs. per Dozen



No. 2—HARTFORD LIGHTNING PATTERN

Blade and Shank both Forged from One Solid Piece of Crucible Steel, Ground and Tempered; Highly Finished; Painted Blue with Polished Cutting Edge, Two Hardwood Handles, riveted on.

Per Dozen

20 in. Cutting Edge; 37 in. Over-all $12 00

One Dozen in a Box; Weight 60 Lbs. per Dozen

No. 3—DANDY, UPRIGHT OR HEATH PATTERN

Combination hand and foot power; a labor and time saver, having a Draw Cut; does away with the strain on the back caused by the use of the ordinary style Hay Knives; also used for Cutting Weeds along Ditches and on Farms, especially in the West and Northwest. Polished Cutting Edge, Upper Part of Blade, Ferrule and Step, Japanned; Bronzed Malleable D Head.

Per Dozen

Blade 9 in. Wide, in Three Tool Steel Sections, Riveted to Plate; 47 in. Long Over-all $12 00

One Dozen in a Crate; Weight 72 Lbs. per Dozen

Extra Sections, for above Knives. 3 00

CORN KNIVES

No. 4—HARTFORD

Per Dozen

20 in. Polished Blade; Fine Crucible Saw Steel, Highly Tempered and Fully Warranted; 8 in. Beechwood Handle, Riveted to Blade $4 25

Half Dozen in a Package; Weight 15 Lbs. per Dozen

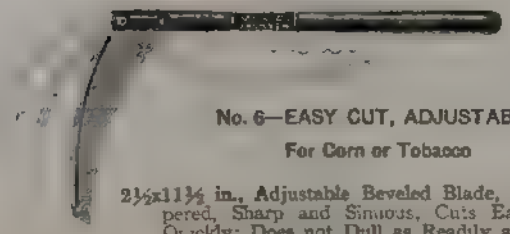
No. 5—NORTHERN KING

Per Dozen

16 in. Bronzed Blade, Ground on Both Sides, Length 22 in. Over-all; Forged from Open Hearth Steel; Double Thick Back; Shank Runs Through 6 in. Brass Ferruled, Hardwood Handle, Riveted at End $3 50

Half Dozen in a Bundle. Weight 15 Lbs. per Dozen

CORN HOOKS



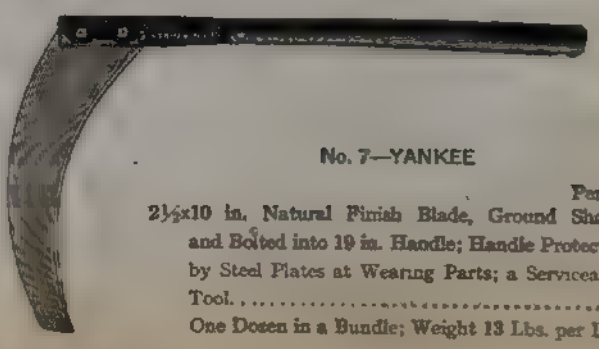
No. 6—EASY CUT, ADJUSTABLE

For Corn or Tobacco

Per Dozen

2½x11½ in., Adjustable Beveled Blade, Oil Tempered, Sharp and Sinuous, Cuts Easily and Quickly; Does not Dull as Readily as a Plain Edge; Can be Folded up when Not in Use and Laid away in Small Space; Handle Protected by Steel Plates at Wearing Parts; Shaped to Fit the Hand without Tiring. $5 00

One Dozen in a Box; Weight 13 Lbs. per Dozen



No. 7—YANKEE

Per Dozen

2½x10 in. Natural Finish Blade, Ground Sharp and Bolted into 19 in. Handle; Handle Protected by Steel Plates at Wearing Parts; a Serviceable Tool. $3 50

One Dozen in a Bundle; Weight 13 Lbs. per Dozen

Fine Gentlemen's and Boys' Complete Swiss Watches

Prices Quoted are for Complete Watches. Illustrations are Exact Size.

CALENDAR WATCH

16-size, open face style, gun metal case, calendar, gives time of the day, date month, day and phases of the moon. Changes automatically every 24 hours. Movement has 7 jewels, expansion balance, patent main spring which gives about 36 hours run when fully wound thus avoiding stopping of watch. This watch can be had with either **silver or gilt metal dial.**

		Each.
No. **H3713**	With gun metal case.....	$10.00
No. **H3714**	With nickel case	10.00
No. **H3715**	With silver case	14.20

ALL ARE OF THE VERY LATEST THIN MODEL DESIGNS.

"THE RACER"

16-size, open face style, start, stop and fly back [illegible] fifth second marginals, stem wind and stem set. Nickel case with [illegible] movement.

No. **H3716**	[illegible]	$11.35
No. **H3717**	[illegible] lever Non-Magnetic gun metal [illegible]	$14.20

GUARANTEED ACCURATE TIME-KEEPERS.

CHIME REPEATER

16-size, [illegible] movement, nickel, highly finished, strikes hours and [illegible] by pressing [illegible] convenient to [illegible] time, if dark.

		Each.
No. **H3718**	With gun metal case	$35.00
No. **H3719**	With silver case	41.70
No. **H3720**	[illegible]	60.00
No. **H3721**	[illegible]	116.70
	[illegible] ter hours	
No. **H3722**	[illegible]	$150.00

"ALARM" WATCH

16-size, open face style, gun metal case, same size as illustration. Hinge is at the top of the case so that back cap can be used for a stand when open. Alarm can be set for any time desired by turning little wheel at the bottom until alarm hand reaches position desired. Movement contains 7 jewels, has lever escapement. This watch is very handy reminder for appointments.

No. **H3723** Each **$14.20**

STERLING SILVER

14-size, open face style, [illegible] back thin model, stem wind and stem set, white enamel dial. Engraved case. Full jeweled cylinder movement.

No. **H3724**	[illegible]	$9.20
	Same as above with 7 jewel lever movement.	
No. **H3725**	Each	$12.50

STERLING SILVER, VERY THIN MODEL

12 size open face style, sterling [illegible] screw back and bezel, [illegible] stem wind, [illegible] Movement has breguet hair-spring, [illegible] regulator and cut balance, thus insuring accuracy as a timepiece.

		Each
No. **H3726**	With silver metal dial	$26.70
No. **H3727**	With gilded metal dial	26.70

PILGRIM, THIN MODEL

14-size, open face style, blue steel extra thin model, solid case. Movement is 7-jewel lever escapement and has visible balance. Dial is enamel and has embossed colored figures, thus making a very attractive watch.

No. **H3728** Each **$9.20**

FRENCH GRAY METAL WATCH

14-size, open face style, assorted patterns. Movement is nickel, has lever escapement and can be had with either **silver or gilt metal** dial.

No. **H3729**	[illegible]	$7.00
	Same as above with high grade 7 jewel lever movement.	
No. **H3730**	Each	$10.85

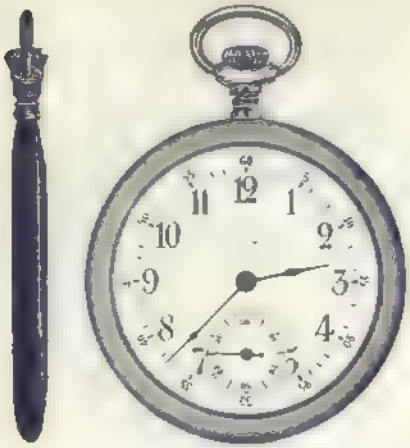
14-size thin model, open face style, gun metal case, stem wind and stem set. Nickel [illegible] dial

No. **H3731**	[illegible]	$6.00
	Same as above in nickel case	
No. **H3732**	[illegible]	$6.00

Gentlemen's, Boys', Ladies' and Misses' Complete Bargain Watches

STEM WIND, STEM AND LEVER SET. GUARANTEED ACCURATE TIMEKEEPERS. ILLUSTRATIONS ARE EXACT SIZE.

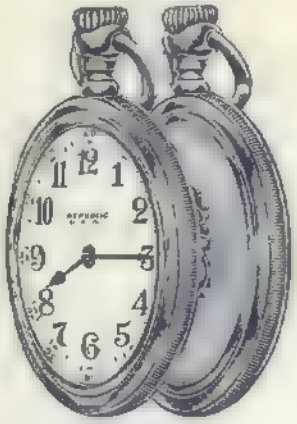
PRICES ARE FOR COMPLETE WATCH.



(Thin Model.)

14 size, gold filled case (guaranteed to wear for 10 years), open face style, screw back and screw bezel, fitted with the **"Popular" Langendorf 7 Jewel Movement,** nickel, lever escapement, non-magnetic, adjusted to two positions white enamel dial patent micrometric regulator hardened and tempered hairspring, stem wind and stem set.

No. 3695 Plain polished case, complete $11
No. 3696 Engine turned case, complete 1
No. 3697 Fancy engraved case, complete 12.50



(Thin Model.)

12 size, gold filled case (guaranteed to wear for 10 years), open face style, screw back and screw bezel engine turned design (like illustration), fitted with the **"Celebrated" Republic 7 Jewel Movement,** magnificently damaskeened in gold on nickel, quick train, lever escapement, exposed pallets, patent micrometric regulator, hard white enamel dial, stem wind and stem set

No. 3698 Complete . . $11.10

1" size, gold filled case (guaranteed to wear for 10 years), fancy engraved [illegible] patterns, fitted with the **"Celebrated" Republic 7 Jewel Movement,** magnificently damaskeened in gold on nickel, quick train, lever escapement, exposed pallets patent micrometric regulator, hard white enamel dial, stem wind.

No. 3699 Hunting style, lever set, complete $11 85
No. 3700 Open face style, screw back and screw bezel, complete 11 10

6 size. Sterling silver case fancy assorted engraved designs fitted complete with the **"Celebrated" Republic 7 Jewel Movement,** magnificently damaskeened in gold on nickel, quick train lever escapement, exposed pallets patent micrometric regulator, hard white enamel dial stem wind and stem set.

No. 3701 Hunting style only, complete $12 95

6 size, gold filled case (guaranteed to wear for 10 years) engraved and engine turned design, fitted with the **"Reliable and Serviceable" Seth Thomas Century 7 Jewel Movement,** nickel, damaskeened, ¾ plate, 7 jewels, plain balance, hard enameled dial stem wind and lever set

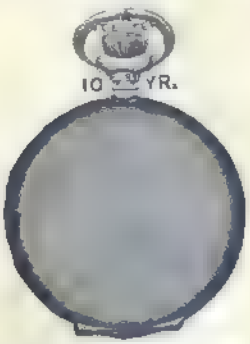
No. 3702 Hunting style only [illegible] . . . $10 15

6 size, gold filled case (guaranteed to wear for 10 years), beautifully engraved design, fitted with the **"Reliable and Serviceable" Seth Thomas Century 7 Jewel Movement,** nickel, damaskeened, ¾ plate 7 jewels, plain balance, hard enamel dial stem wind and lever set

No. 3703 Hunting style only, complete . $10 15

6 size, gold filled case (guaranteed to wear for 10 years), beautifully engraved design, fitted with the **"Reliable and Serviceable" Seth Thomas Century 7 Jewel Movement,** nickel, damaskeened, ¾ plate, 7 jewels, plain balance, hard enamel dial, stem wind and lever set

No. 3704 Hunting style only, complete . $10 15



0 size, gold filled case (guaranteed to wear for 10 years), plain polished design [illegible] **Admiral 7 Jewel Movement,** nickel [illegible] white enamel dial, [illegible] set.

No. [illegible] Hunting style, complete $13 35
No. 3706 Open face style, jointed cap and snap bezel, complete 13 20

0 size, gold filled case (guaranteed to wear for 10 years) engine turned design [illegible] **Admiral 7 Jewel Movement** [illegible] pendant set.

No. 3707 Hunting style, complete $13.35
No. 3708 Open face style, jointed cap and snap bezel, complete 12.85

0 size, gold filled case (guaranteed to wear for 10 years), beautifully engraved [illegible] **Admiral 7 Jewel Movement,** [illegible] white enamel dial pendant set.

No. 3709 Hunting style, complete $13 35
No. 3710 Open face style jointed cap and snap bezel complete 12 85

0 size, gold filled case (guaranteed to wear for 10 years), beautifully [illegible] with the **Admiral 7 Jewel Movement,** [illegible]

[illegible] $13 35
[illegible] 85

Fine Solid Sterling Silver TABLEWARE

Quality Guaranteed

Sterling Silver 925-1000 Fine

The ounce quotation represents the approximate weight per dozen.

Illustrations Actual Size

THE "VANDYKE"

Your attention is called to this new manner of furnishing the Vandyke Silver with applied initials. The letters being of Sterling Silver and applied to the goods make a much more effective and suitable way of ornamenting this antique pattern than the usual mode of engraving initials. The initials are supplied in sizes suitable for each piece, but only in this style of lettering

The Acme of Refinement in

Antique Silver

Hand Wrought, Flemish in character and bearing the name of the Flemish Artist

"VAN-DYKE"

A peerless specimen of Handwrought Sterling Silver Flat Ware Butler Finish

This pattern without initials can be furnished at once, while same with initials require but a few days extra time

			Price with Applied Initial	Price without Initial
No. 1	Tea Spoons, medium wt., 8 oz.	per doz.	$27 75	$20 65
No. 2	Tea Spoons, heavy wt., 10 oz.	"	33 00	26 10
No. 3	Tea Spoons, extra heavy wt., 12 oz.	"	38 50	31 40
No. 4	Dessert Spoons, medium wt., 17 oz.	"	51 25	44 35
No. 5	Dessert Spoons, heavy wt., 20 oz.	"	59 05	52 15
No. 6	Table Spoons, heavy wt., 20 oz.	"	59 05	52 15
No. 7	Table Spoons, extra heavy wt., 23 oz.	"	66 85	60 00
No. 8	Soup Spoons, heavy wt., 20 oz.	"	59 05	52 15
No. 9	Dessert Forks, medium wt., 15 oz.	"	46 00	39 10
No. 10	Dessert Forks, heavy wt., 18 oz.	"	53 85	46 95
No. 11	Medium Forks, heavy wt., 18 oz.	"	56 45	49 55
No. 12	Medium Forks, extra heavy wt., 21 oz.	"	66 85	59 95
No. 13	Medium Knives, hollow handle	"	63 65	56 75
No. 14	Dessert Knives, hollow handle	"	56 00	49 10
No. 15	Butter Knife	each	5 55	4 90
No. 16	Sugar Shell	"	4 00	3 40
No. 17	Berry Spoon	"	11 60	10 85
No. 18	Bouillon Spoons	per doz.	38 50	30 70
No. 19	Coffee Spoons (large size)	"	24 00	21 70
No. 20	Coffee Spoons (small size)	"	24 70	18 35
No. 21	Ice Cream Spoons	"	39 70	33 35

			Price with Applied Initial	Price without Initial
No. 22	Mustard Spoons	each	$ 3 20	$ 2 70
No. 23	Olive Spoon (long)	"	5 35	4 85
No. 24	Olive Spoon (Short)	"	1 70	1 30
No. 25	Orange Spoons	per doz.	45 85	38 35
No. 26	Salad Spoons	each	10 35	9 70
No. 27	Cold Meat Forks (large size)	"	10 70	10 00
No. 28	Cold Meat Forks (small size)	"	6 20	5 50
No. 29	Oyster Forks	per doz.	38 35	30 00
No. 30	Pickle Forks (long)	each	5 00	4 35
No. 31	Salad Forks	"	10 70	10 00
No. 32	Salad Forks (individual size) (small)	per doz.	51 50	44 00
No. 33	Cream Ladles	each	5 00	4 50
No. 34	Gravy Ladles	"	10 70	10 00
No. 35	Medium Ladles	"	24 20	23 35
No. 36	Oyster Ladles	"	18 85	18 00
No. 37	Punch Ladles	"	27 50	26 20
No. 38	Whipped Cream Ladles	"	4 85	4 20
No. 39	Sugar Tongs	"	5 70	5 20
No. 40	Butter Spreaders (large)	per doz.	50 35	44 00
No. 41	Butter Spreaders (small)	"	39 70	33 35
No. 42	Carving Set (three pieces) (hollow handle)	per set	40 00	37 50

FINE SOLID STERLING SILVER TABLEWARE

Quality guaranteed sterling silver, 925-1000 fine.

All goods quoted on this page can be furnished in any quantity desired at the per dozen price quoted.

TIPPED PATTERN

No.	Tea Spoons	Doz
[illegible]	Light	$[illegible]
[illegible]	Medium	[illegible]
[illegible]	Heavy	24 85
3256	Ex. heavy	29 85

Dessert Spoons

3256	Medium	$37.35
3257	Heavy	44.80

Table Spoons

[illegible]	Medium	$44.80
[illegible]	Heavy	49.75
3260	Ex. heavy	59.75

Dessert Forks

3261	Medium	$37.35
3262	Heavy	44.80

Table Forks

[illegible]	Medium	$42.30
[illegible]	Heavy	47.25
[illegible]	Ex. heavy	57.20

FANCY PIECES IN THE TIPPED PATTERN ARE NOT MADE

SHIRLEY PATTERN

Bright finish

No.	Tea Spoons	Doz
3266	Light	$14.00
3267	Medium	18 [illegible]
3268	Heavy	23 35
3269	Ex. heavy	28 00
3270	Massive	32 65

Dessert Spoons

3271	Medium	$35.00
3272	Heavy	42 00
3273	Ex. heavy	51 3[illegible]

Table Spoons

3274	Medium	$46 65
3275	Heavy	56.00
3276	Ex. heavy.	65.35

Soup Spoons

3277	Medium	$42.00

Dessert Forks

3278	Medium	$35.00
3279	Heavy	42.00
3280	Ex. heavy.	51.35

Table Forks

3281	Medium	$46 65
3282	Heavy	56.00
3283	Ex. heavy	65.35

[illegible] Handle Knives

3284	Dessert	$46.70
3285	Table	53.35

Butter Knives Ea.

3286	Plain blade	$5 00
3287	Gilt blade	5.50

Sugar Shells

3288	Plain bowl	$3.70
3289	Gilt bowl	4.00

ABOTTSFORD PATTERN

French gray finish

No.	Tea Spoons	Doz
3290	Light	$16.35
3291	Medium	21 00
3292	Heavy	26.45
3293	Ex. heavy.	31.55

Dessert Spoons

3294	Medium	$42 00
3295	Heavy	47 45

Table Spoons

3296	Medium	$57 65
3297	Heavy	68 35
3298	Ex. heavy.	84 00

Soup Spoons

3299	Medium	$47 45

Dessert Forks

3300	Medium	$42 00
3301	Heavy	47 45

Table Forks

3302	Medium	$53 65
3303	Heavy	68 35
3304	Ex. heavy	63.00

Hollow Handle Knives

3305	Dessert	$46 70
3306	Table	53 35

Butter Knives Ea.

3307	Plain blade	$4.70
3308	Gilt blade	5 20

Sugar Shells

3309	Plain bowl	$3.00
3310	Gilt bowl	3.35

MILLE FLEUR PATTERN

French gray finish

The [illegible] art [illegible] Mille Fleur pattern [illegible] different [illegible]

Tea Spoons

No.	Tea Rose	doz
3311	Medium	$22.40
3312	Heavy	28 00
3313	Ex. heavy	33 60
3314	Massive	39 20

Dessert Spoons Hybiscus

3315	Medium	$50.40
3316	Heavy	61 60
3317	Ex. heavy.	72.85

Table Spoons—Daisy

3319	Heavy	$67.20
3318	Ex. heavy.	78 40
3320	Massive	89 60

Soup Spoons Hybiscus

3321	Medium	$50 40

Dessert Forks Chrysanthemum

3322	Medium	$50 40
3323	Heavy	61.60
3324	Ex. heavy	72.85

Table Forks—Sweet Pea

3325	Heavy.	$67 20
3326	Ex. heavy	78 40
3327	Massive.	89 60

Hollow Handle Knives

3328	Dessert	$46 70
3329	Table	53.35

Butter Knives—Poppy Each

3330	Plain blade	$5.00
3331	Gilt blade	5.50

Sugar Shells Tea Rose

3332	Plain bowl	$3.85
3333	Gilt bowl	4.20

EDGEWOOD PATTERN

French gray finish

No.	Tea Spoons	Doz
3334	Medium	$18.65
3335	Heavy	23 35
3336	Ex. heavy.	28.00
3337	Massive.	32.65

Dessert Spoons

3338	Medium	$37.35
3339	Heavy	42.00
3340	Ex. heavy.	46.65

Table Spoons

3341	Medium	$46 65
3342	Heavy	56 00
3343	Ex. heavy	65.35

Soup Spoons

3344	Medium	$37.35

Dessert Forks

3345	Medium	$42 00
3346	Heavy	42 00
3347	Ex. heavy	46 65

Table Forks

3348	Medium	$46.65
3349	Heavy	56 00
3350	Ex. heavy	65 35

Hollow Handle Knives

3351	Dessert	$46.70
3352	Table	53 35

Butter Knives Ea.

3353	Plain blade	$5.00
3354	Gilt blade	5.50

Sugar Shells

3355	Plain bowl	$3.70
3356	Gilt bowl	4.00

FRONTENAC PATTERN

French gray finish

No.	Tea Spoons	Doz
3357	Medium	$22.40
3358	Heavy	28 00
3359	Ex heavy	33 60
3360	Massive	39 20
3361	Ex. mass	44 80

Dessert Spoons

3362	Medium	$50 40
3363	Heavy	61 60
3364	Ex heavy	72 80

Table Spoons

3365	Heavy	$67.20
3366	Ex. heavy.	78.40
3367	Massive.	89.60

Soup Spoons

3368	Medium	$50 40

Dessert Forks

3369	Medium	$50.40
3370	Heavy	61 60
3371	Ex. heavy.	72 80

Table Forks

3372	Heavy.	$67.20
3373	Ex heavy.	78.40
3374	Massive	89.60

Hollow Handle Knives

3375	Dessert	$46.70
3376	Table	53.35

Butter Knives Ea

3377	Plain blade	$5.50
3378	Gilt blade	6 00

Sugar Shells

3379	Plain bowl	$3 85
3380	Gilt bowl	4.20

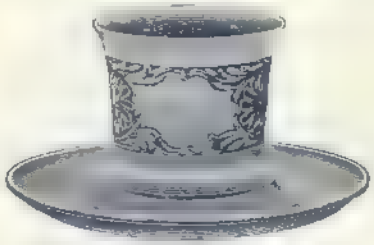
High Grade Quadruple Silver Plated Smokers' Articles

If we receive a trial order you will remain a customer.

No. F202 CIGAR BOX.....$10.70
Burnished. Pierced Cedar Lining. Dimensions 8 x 3 x 2 inches. Capacity 50 Cigars.

No. F203 CIGARETTE BOX.....$6.00
Burnished. Pierced Cedar Lining. Dimensions 5 x 2 x 1⅝ inches. Capacity 100 Cigarettes.

No. W52 SMOKE SET.....$5.70
Burnished. Gray Decoration. Gold Lined Ash Tray. 2 Cigar Holders. Safety Match Box Holder, Top Piece for Burnt Matches, Cigarettes, etc. Height, 5⅝ inches. Diameter, 4½ inches.



No. W330 MATCH HOLDER AND TRAY $2.00
Nickel. Gray and Brass Ash Tray. Ash Tray Attached. Height, 2¾ inches.

No. W338 MATCH HOLDER.....$1.50
Burnished Brass. Gold Lined. Height, 2½ inches.

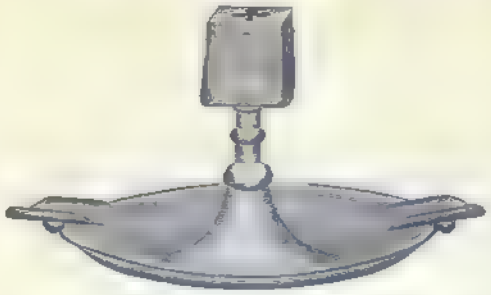
No. W1 CIGAR LIGHTER.....$5.15
Lamp Post. Silver, Fitted with Colored Glass. Height, 8¾ inches.

No. W3 CIGAR LIGHTER.....$6.00
Alcohol Lamp. Butler Finish. French Gray Trimmed. Height, 3¾ inches. Width, 4 inches.

No. D1512 ASH TRAY.....$3.70
Burnished Footed. Removable Crystal Center. Height, 1 inch. Diameter, 3¾ inches.

No. W336 MATCH HOLDER.....$2.70
Burnished, Engraved, Gold Lined.
Cut Actual Size.

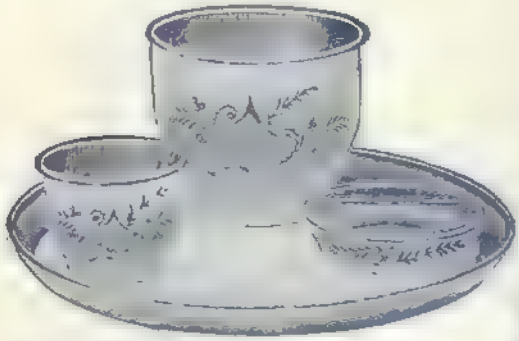
High-Grade Quadruple Silver Plated Smoker's Articles



No. D-1598 ASH TRAY AND CRUMB MARKER $2.
Burnished. Height, 2½ inches. Diameter, 5 inches

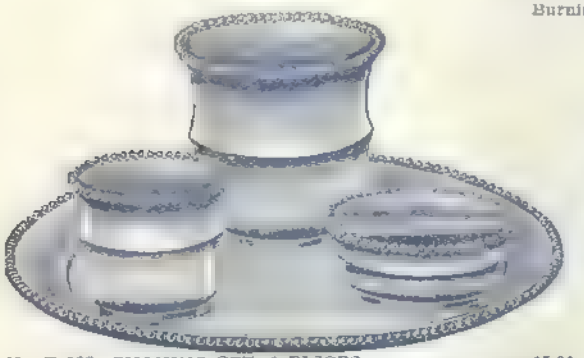
No. S-950 MATCH
[illegible]
Height 4 inches
Burnished, beaded

No. [illegible] SMOKING SET, 4 PIECES $9.00
[illegible] Length of tray 6¾ inches. Height of cigar holder, 3⅛ inches

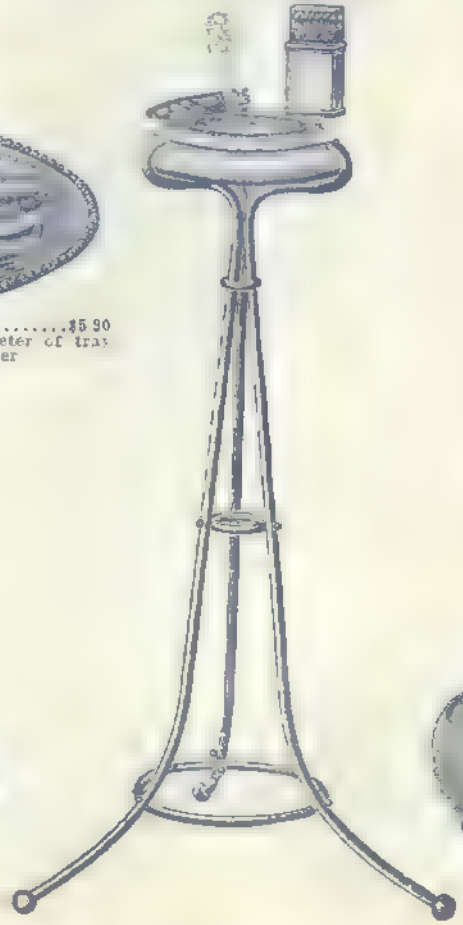


No. R-578 SMOKING SET, 4 PIECES.. $3.15
Satin, bright cut, engraved, gold lined cups
Diameter of tray, 6¾ inches. Height of cigar holder, 2¼ inches

No. S-200 SMOKING SET, 4 PIECES..$14.70
(Mahogany Tray)
Burnished, gold lined cups. Length of tray, 8 inches. Height, 6 inches



No. R-517 SMOKING SET, 4 PIECES $5.90
Burnished, beaded border, gold lined cups diameter of tray 8 inches, burnished border, satin center height of cigar holder, 3 inches



No. D-1541 COMBINATION MATCH HOLDER AND ASH TRAY.....$5.35
[illegible] Diameter of tray, 3½ inches.

No. F-993 SMOKER'S STAND $17.35
Finished in silver. Height, 29 inches.

No. D-1595 SMOKING SET $3.00
Burnished. Height, 9½ inches. Diameter of tray, [illegible] of lid forms ashtop as per illustration.

A Saving In Selling

A saving in dusty and shop worn wire cloth by displaying your wire cloth on a Bowser wire cloth display rack.

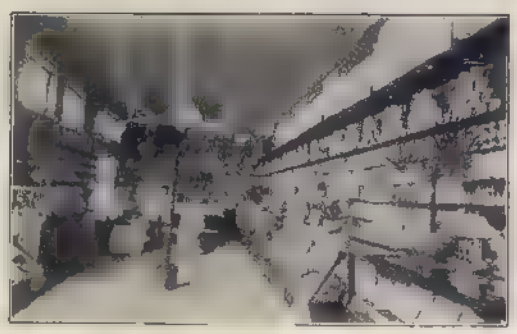
The chief advantage in its use lies in the time and effort it will save in the matters of looking for kinds and sizes, showing them, cutting them, rerolling, etc.

But there is, in addition, a very large advertising value to be gained by its use—it shows Wire Cloth to every person that enters your store and whether they buy at once or wait ten years—THEY'RE COMING TO YOU when the time comes.

Speedy sales are doubly profitable because of the time saving.

Write for full details to Dep. A.

R. M. BOWSER & SON
RENFREW, PA.



Instantly

you can see the article customer calls for when you use

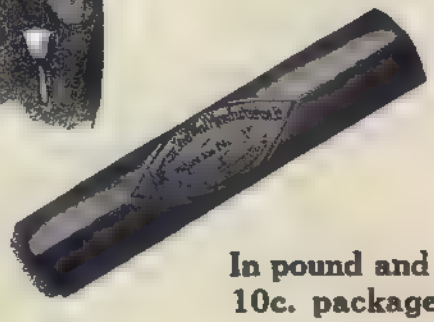
Piqua Adjustable Shelf Brackets

they give—easily—30% more room, goods may be arranged on a continuous, unobstructed line, are easily taken down and removed from place to place without expense—or injury to shelving.

Look into this model system
get Catalog H for Hardwaremen

THE PIQUA BRACKET CO.
PIQUA, OHIO

Rub It With STEEL WOOL



In pound and 10c. packages

Beware of Imitations

American Steel Wool Mfg. Co.
451-453 Greenwich St., New York

The Razor that Can't Open Until You Want It To

The new idea that makes the best razor better—Torrey Razors now have our safety lock—they can't open till you want them to, then it is easy.

It locks there

If it drops on the floor—if the children get at it—if you throw it loose in the bottom of the grip—it cannot be harmed or do harm, for the blade is locked closed.

Torrey Razors

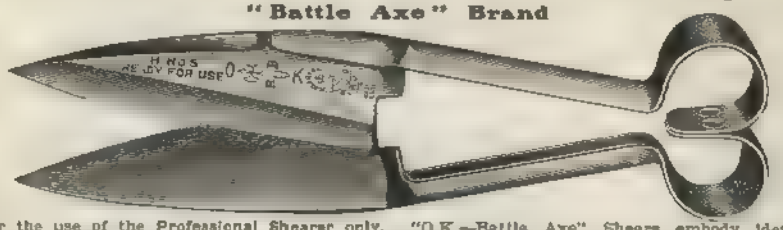
have always been good sellers. Men like them because they take such a good edge and hold it so well. Now they will sell better than ever, because our new lock will appeal at once to nine men out of ten

Remember, this locking feature is patented and exclusive to Torrey Razors. Write to-day for our special introductory plan

THE J. R. TORREY RAZOR CO.
Dept. AG Worcester, Mass.

Hind's "O.K.--Ready for Use" Sheep Shears

"Battle Axe" Brand



BURGON & BALL PATENT No 294 B B

B B

A

Made in England

O

B B

K

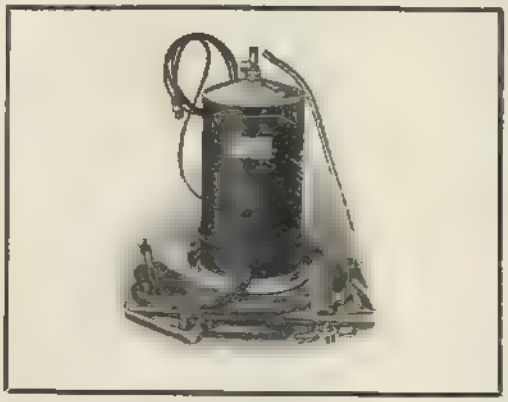
For the use of the Professional Shearer only. "O K—Battle Axe" Shears embody ideas of Professional Shearers adopted after years of experiment and consultation with them. They are ground and "set" "Ready for Use" as required by the Professional Shearers and as recommended by great numbers of them. Blades are Extra long and Extra wide, and the edges straight true and free from "kinks." Jobbers furnished with printed matter and quotations upon request.

Made by Burgon & Ball, Ltd., Sheffield, England. Established 1730—Foremost ever since.

SOLE U. S. AGENTS

WIEBUSCH & HILGER, Ltd., 106-110 Lafayette St., New York City

PACIFIC COAST OFFICES: San Francisco, Cal.; Portland, Ore.; Los Angeles, Cal.



The Need of Power

The Vacuum Cleaner was evolved as a labor saver. When it fails to save labor it fails of its purpose, and is of no value beyond what the junk man will pay for it.

When any mouve agent but an electric motor operates its mechanism, the cost in either labor, money or convenience proves excessive, and it's apt to fail in the matter of Power.

Power is an absolute necessity in a vacuum cleaner. When you consider that the bristles of the old fashioned broom touch the dust as it lays nestled in the texture of a carpet, and that the vacuum cleaner must SUCK it up, you will readily see the necessity for power—lots of it.

But brooms scatter dust, so that sweeping isn't necessarily cleaning—it's a case of dust shifting.

We offer the consumer a maximum amount of power—of dust sucking efficiency—but we ask that he pay for it.

And he WILL pay more when he's sure he's getting more—when he sees the Everson at work.

Let us send technical specifications.

Everson Mfg. Company

59 TEMPLE PLACE, BOSTON, MASS.

The Biggest Polish "HIT" Ever Scored

O-Cedar Polish

Best Polish ever made for Furniture, Pianos, Automobiles, Floors and all Varnished or Enameled Surfaces.

A Varnish Food and Renewer.

Retails for 25c., 50c., $1.00 $1.50 and $2.50

Handle 4½ feet long

O-CEDAR POLISH MOP

Gives more satisfaction than any other dustless mop. A patented ring mop, easily washed, appeals to every housewife.

Retails for $1.50

O-Cedar products are guaranteed to both purchaser and dealer on a strict "money back if not satisfied" guarantee that means just what it says.

Write for dealer's discounts and our window demonstration offer that moves merchandise.

O-Cedar Polish Products are made only by

Channell Chemical Co.

CHICAGO, ILL.

RUBBER HEADED NAILS

We make many different little things of rubber, such as the above, like cane, chair, stem and screw tips, bumper and fender tips, etc. Our catalogue shows many kinds of rubber specialties. If what you want is not there, we will make it for you.

SEND FOR CATALOGUE

ELASTIC TIP CO.

MAKERS OF RUBBER SPECIALTIES

370 Atlantic Ave., Boston, Mass., U. S. A.

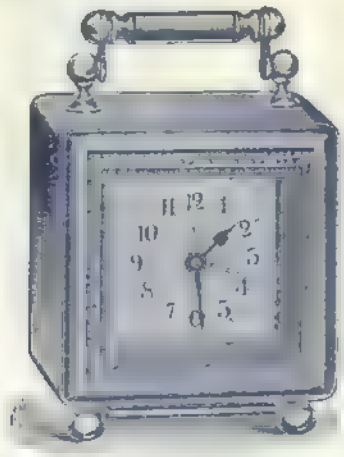
Fine Imported Traveling, Desk and Desk Alarm Clocks.

PRICES EACH.

TRAVELING CLOCK.

One-day Lever time. Genuine leather case. Black, Green or Red. 3 inches high. 2-inch Silver dial.

No. 6072 Each . . $2.55



SUEVIA TRAVELING CLOCK WITH ALARM.

Silver-plated case. Height 2¾ inches, silver-plated dial with Arabic figures. The smallest and neatest traveling clock made with alarm. Each clock in Leatherette case.

No. 6073 Each..... . . ..$7.50

DARLING ALARM CLOCK.

Nickel or copper case, [illegible] inches. Original size same as illustration. [illegible] dial with Arabic figures. [illegible] One key winds clock and [illegible] Solid [illegible] running alarm clock made. [illegible]

No. 6074 Each $4.75

DESK CLOCK.

Nickel-plated or copper-plated case. Height 4 inches, 2-inch silver-plated dial. One-day time.

No. 6075 Each.....$2.40

DESK CLOCK.

Same clock as above in solid brush brass case.

No. 6076 Each. $2.80

DESK CLOCK.

Nickel-plated, wood base with marble slab for memorandum. Height 4¼ inches, 2-inch silver-plated dial. One-day time.

No. 6077 Each $4.00

DESK CLOCK.

Same clock as above in solid brush brass case and stand. Base with marble slab for memorandum.

No. 6078 Each.....$4.70

TINY TIME.

Height 4 inches, width 2¼ inches, beveled glass. Case made in Nickel or Gold-plated. One-day time.

No. 6079 Each. $2.55

DESK ALARM CLOCK.

A novel Desk Alarm Clock, in the style of a dinner call. The clock is suspended in a gilded arch with mahogany base. Height 5 inches. Clock case is made in copper, representing two bells. One-day lever movement of first quality, alarm with two hammers.

No. 6080 Each $3.70

MAHOGANY ALARM CLOCK.

Mahogany case. Height 5 inches, width 3¾ inches, 2¼-inch silver dial, convex glass. Case inlaid with ebony and maple. One-day time with alarm.

No. 6081 Each . . . . [illegible]

FRENCH TRAVELING CLOCK.

Gold-plated case. Height of clock 4½ inches, without handle. Eight day time, cylinder French movement. Beveled glass on four sides and top. Leatherette case.

No. 6082 Each $12.70

Same clock with alarm in leatherette case:

No. 6083 Each $13.35

COSMOS EIGHT-DAY ALARM FRENCH TRAVELING CLOCK.

Same clock as above with eight-day automatic patent alarm, to be wound only once a week. Leatherette case.

No. 6084 Each $23.35

FRENCH TRAVELING CLOCK.

Gold-plated case. Height of clock 4½ inches, without handle. Eight day lever movement with one-day alarm. Beveled glass on four sides and top. Leather case.

No. 6085 Each .$33.35

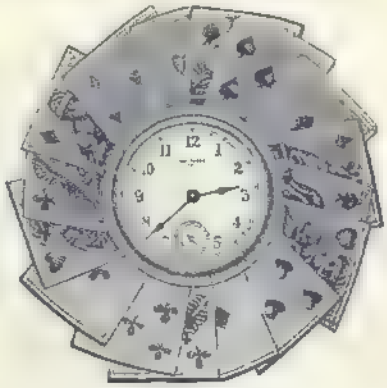
New Haven Clock Co.'s Fine Leather and Rich Gold Novelty Clocks.

GUARANTEED ACCURATE TIMEKEEPERS. PRICES EACH.

LEATHERN.

Leather case, height 3 inches, width 3 inches, 2-inch porcelain dial, one day time movement

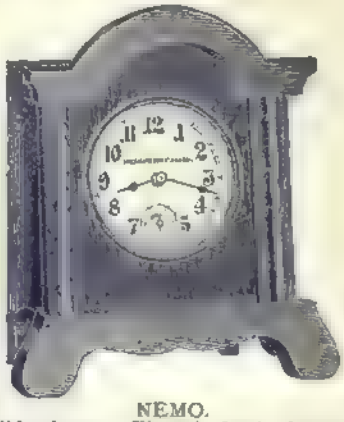
No. 6053 Each $4 70



FLUSH.

Rich ormolu gold; height 5 inches, width 5 inches, 2-inch white dial, one-day time movement.

No. 6054. Each $3.90



NEMO.

Solid oak case, Flemish finish, height 4¼ inches, width 4 inches, 2-inch dial, fitted with one-day intermittent "Junior Tattoo" alarm, with "alarm or silent switch."

No. 6055. ..... $4.90

MARVEL.

Heavy brass case, height 3⅛ inches, width 2⅝ inches, 2-inch porcelain dial, gold plated, silver or gun metal finish.

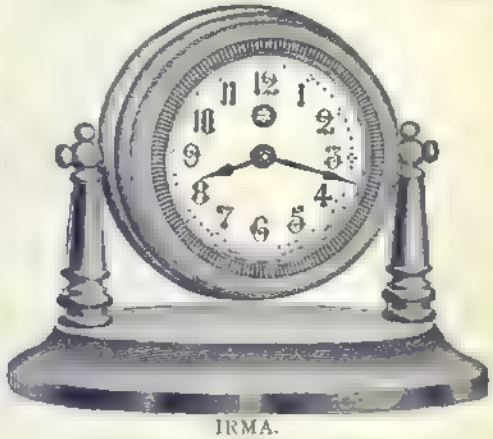
No. 6056. Eight-day time movement. Ea. $6.90
No. 6057. One-day intermittent alarm. " 6.90

Note: Be sure to specify finish wanted.

JASPER CLOCK IN LEATHER CASE.

Leather case, height 3¾ inches, width 3 inches, 1¾ inch porcelain dial with magnifying lenses, one-day time movement.

No. 6058. Each $10.50



IRMA.

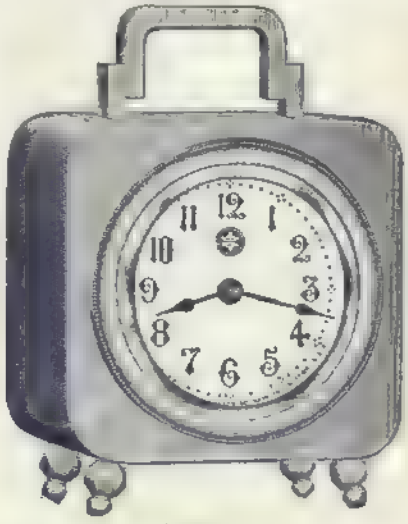
Gold plated case, height 3½ inches, width 4⅛ inches, 2-inch porcelain dial.

No. 6059. One-day time movement. Each... $5 30
No. 6060. Eight-day " " " 7 30
No. 6061 One-day with intermittent alarm. 7 30

TRAVELER.

Heavy brass, holding a one day time watch, height 2⅞ inches, width 2 inches, 1⅛-inch dial.

No. 6062. Gun metal finish. Each.....$2.95
No. 6063 Old brass " " 2.95
No. 6064. Nickel " " 2.95
No. 6065. Copper " " 2.95
No. 6066. Polished brass finish. " " 2.95



PANZA.

Solid brass, height 4 inches, width 2¾ inches, 2 inch porcelain dial, gold plated, silver or gun metal finish case.

No. 6067. One-day time movement. Each $5 30
No. 6068. Eight-day " " " 7.30
No. 6069. One-day time movement with intermittent alarm " 7.30

Note: Be sure to specify finish wanted.

KENWICK.

Solid brass, height 4¼ inches, width 2⅝ inches, 1¾ inch porcelain dial, gold plated, silver, gun metal, or old brass finish

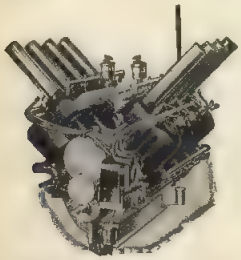
No 6070 One day time. Each $7 00
No 6071. " " alarm. " 9.00

Note; Be sure to specify finish wanted.

Trebert 1912 Products

The illustrations show two of the H. L. F. Trebert products, manufactured at Rochester, N. Y. In the piston valve motor one valve performs the functions of intake and exhaust from each cylinder. This valve is shaped somewhat like the piston of a cylinder, except that it has a solid base, hence the name. Near the top and bottom are single compression rings. The valve merely slides up and down in a cylinder so that there is no possibility of a carbonization around it.

About the center of the valve sleeve slots are cut through its cylindrical face about the size of intake opening to the main cylinders on either side of the valve cylinder. When the main piston is in the right position for a charge of gas to be admitted to the cylinder, this valve lifts so that it is above, the slots across the sleeve are level with the intake on either side. The gas enters the engine across and through the cylindrical valve chamber. The valve then drops a little following the cam, and cuts off the intake and exhaust, allowing compression and firing. At the proper time the valve drops still lower following the cam, and allows the exhaust to shoot over the top of the valve. It then raises, cutting off the exhaust, opens the intake and the process is repeated.



The Eight-cylinder 80-100 h. p. Vertical Trebert Engine with the Piston Valve.

Splash lubrication is used and a little oil in the gasoline is used to lubricate the valves, though the oil cup can be used for this if preferred. In the V type one cup oils each four valves. In the vertical type one cup oils all the valves.

The company have in stock an 8 V special racing boat engine that weighs three hundred fifty pounds plus equipments. They intend to market a 4-cylinder 40-horsepower and a 6-cylinder 60-horsepower vertical type in the near future. The prices of these engines will be $1500, $1000 and $1500 respectively.

The Nongyroscopic Rotary Motor is one which embodies ideas somewhat different from the ordinary gas engine, that is, the cylinders rotate about a shaft at the same time acting as a fly-wheel. There is a stationary main or axial shaft around which all the six cylinders revolve; but contrary to the usual practice each cylinder is parallel with this axis. The cylinders, which are cast separately, are fastened in a circle to the front end of a two piece, cylindrical, aluminum crank case, being held in place by this and the cylindrical port chamber. Eighteen nickel steel studs pass through the crank case and cylinder lugs, giving the

The Trebert Justrite, Nongyroscopic, Valveless, Four-cycle Rotary Motor

whole greater strength than though it were a simple casting. The front end of each cylinder is securely fastened to the circular port chamber, which besides holding them in place contains in its center the front bearing on the axial shaft

In the crank case are six crank shafts one for each cylinder. These radiate from the axial shaft like the spokes of a wheel each sixty deg from each other. At each end is a ball bearing and a ball bearing is inserted in the connecting rod bearing. The outer ends of these shafts run free, and the inner end drives through a steel gear against a large stationary bevel gear fastened on the rear end of the axial shaft. The scheme is something like reversing the process used in transmitting the power to the rear axle of an automobile, only in the engine the large gear, which corresponds to the driving shaft of the car, is stationary and the revolving of the individual gears turns the motor over around it. The six cylinders, crank case, and port chamber, when revolving on their bearings, form a cylindrical mass, whose axis is the axial shaft of the engine. All the motor revolves except the axial shaft and the gas and exhaust chamber with their connection, so that the engine is its own fly-wheel. The driving shaft projects from the rear end of the crank case, to the right behind the magneto in the cut.

This Trebert engine is used for aeroplane purposes and sells for $2000, including thrust bearing.

"Universal" Samovars and Sets, "Universal" Tea Ball Tea Pots and the "Universal" Coffee Percolators

Manufactured by Landers, Frary & Clark.

The "Universal" Samovar

For afternoon Teas! Or tea at any time. A stove that boils the water in seven minutes.

A Tea Ball suspended through the cover—lowered into the water as soon as it boils—raised out of it after one or two minutes and then suspended out of the way inside the cover.

A faucet to pour from.

The last cup the same as the first. Every cup perfect tea.

Made of Copper.
Ebonwood Handles and Knob.

Capacity Three Pints or Six Cups.

No. 606C Polished Copper.....Each $1[illegible]
No. 606N Nickel plated.....Each
No. 606S Silver plated.....Each

Tea Ball Tea Pot

Made of Copper. Non-heating Handles.

Capacity Three Pints or Six Cups

No. 300C Polished Copper..Each $10.[illegible]
No. 300N Nickel plated.....Each 10.[illegible]
No. 300S Silver plated.....Each 12.[illegible]

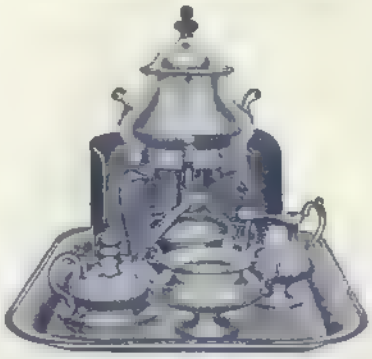
"Universal" Samovar

Made of Copper.
Furnished in Nickel Plate only
Ebonwood Handles and Knobs.

Capacity Three Pints or Six Cups.

No. 606S Nickel plated.....Each $13.90

"Universal" Samovar Set

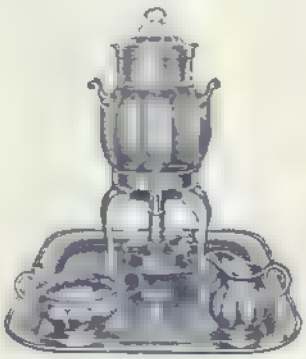


Prices for complete 6 piece "Universal" Samovar sets. Tray is 12x18 inches. Has End Handles. Polished Border and Satin Center.

Capacity Three Pints or Six Cups.

No. 606-6C Copper.....Per set $[illegible]
No. 606-6N Nickel plated.....Per set $1[illegible]
No. 606-6S Silver plated.....Per set 6[illegible]

Four and Six-Piece Coffee Machine Sets



Prices for complete 4 piece sets. Tray is 12x18 inches Polished Border and Satin Center

			Per set
No.	4064C	Copper.....with 3 pint machine	$2[illegible]
No.	4064N	Nickel plated...with 3 pint machine	[illegible]
No.	4064S	Silver plated...with 3 pint machine	[illegible]
No.	4094C	Copper.....with 4 pint machine	[illegible]
No.	4094N	Nickel plated...with 4 pint machine	[illegible]
No.	4094S	Silver plated...with 4 pint machine	[illegible]

Prices for complete 6 piece sets. Tray is 12x18 inches Has end handles. Polished border and satin center.

			Per set
No.	5066N	Nickel plated....with 3 pint machine	$59.80
No.	5066S	Silver plated....with 3 pint machine	74.40
No.	5096N	Nickel plated....with 4 pint machine	61.80
No.	5096S	Silver plated....with 4 pint machine	77.75

The "Universal" Tea Ball Tea Pot

Every woman knows Tea leaves should not steep too long, that Tea Balls are drippy and inconvenient.

In the "Universal" the Tea Ball remains in the Pot, and when the tea has steeped enough is raised from the water and suspended above it, inside the cover.

The last cup is just the strength of the first and every cup Perfect Tea.

Made of Copper. Non-heating Handles.

Capacity Three Pints or Six Cups

No. 606C Polished Copper..[illegible]
No. 606N Nickel plated.....[illegible]
No. 606S Silver plated[illegible]

The "Universal" Individual Tea Ball Tea Pot

Made of Copper. Non-heating Handles.

Capacity Two Cups.

No. 101C Polished Copper..Each $ 8.50
No. 101N Nickel plated....Each 8.50
No. 101S Silver plated....Each 10.00

Coffee Percolator

Capacity Three Pints or Six Cups.

No. 666C Copper.....Each $13.90
No. 666N Nickel plated....Each 13.90
No. 666S Silver plated....Each 15.80

Capacity Four Pints or Nine Cups.

No. 669C Copper.....Each $15.50
No. 669N Nickel plated....Each 15.50
No. 669S Silver plated....Each 18.40

No Matter What You Want We Can Furnish it at Lowest Prices

Universal Table Kettles

New, Handsome and Artistic Designs

Ebonized handles and knobs. Lamp, stand and handle brackets made of brass. Body of kettles made of solid copper.

Each kettle is equipped with a patented "UNIVERSAL" alcohol lamp which burns with a hot flame and is easily regulated.

Capacity, 2½ pints.

No. 525	Nickel plated	$12 80
No. 525	Copper	[illegible]
No. 525	Silver plated	6 00

Capacity, 3 pints.

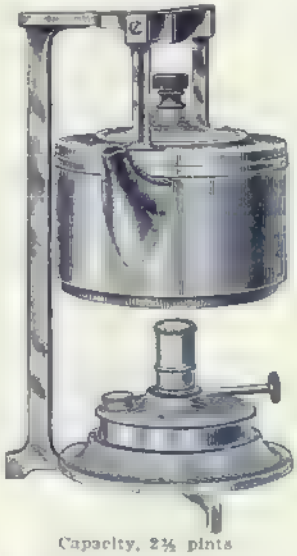
No. 531	Nickel plated	$20 80
No. 531	Copper	[illegible]
No. 531	Silver plated	[illegible]

Capacity, 2½ pints.

No. 524	Nickel plated	$14 80
No. 524	Copper	14 80
No. 524	Silver plated	18 00

Capacity, 3 pints.

No. 521	Nickel plated	$16 80
No. 521	Copper	16 80
No. 521	Silver plated	20 00



Capacity, 2½ pints.

No. [illegible]	Nickel plated	$15 80
No. [illegible]	Copper	15 80
No. [illegible]	Silver plated	[illegible]

Capacity, 2½ pints.

No. 524	Nickel plated	$18 80
No. 524	Copper	18 80
No. 524	Silver plated	22 00

Capacity, 3 pints.

No. 511	Nickel plated	$2[illegible]
No. 511	Copper	[illegible]
No. 511	Silver plated	[illegible]

Experience has perfected our product, established our standard, and made our reputation our guarantee.

Capacity 2½ pints.

No. 514	Nickel plated	$[illegible] 40
No. 514	Copper	40
No. 514	Silver plated	29 30

UTICA NIPPERS AND PLIERS

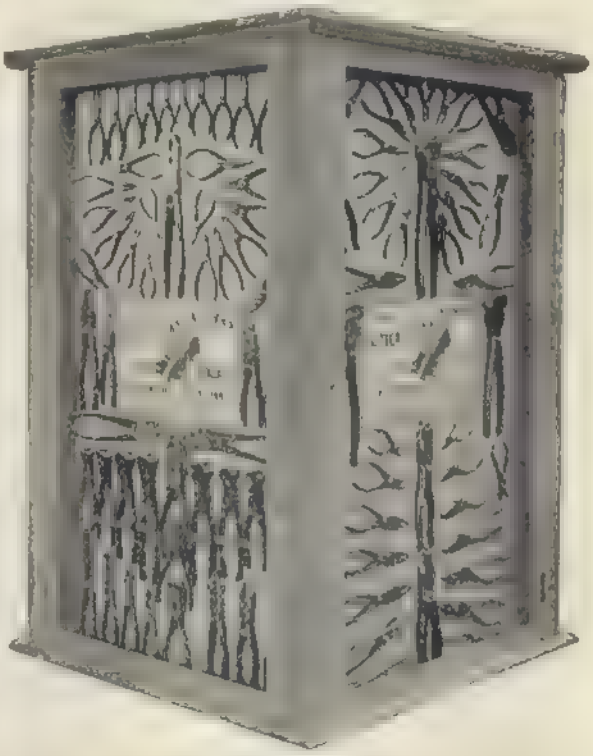
THE QUALITY LINE

No. 40 Assortment

DO YOU WANT A CLEVER TOOL SALESMAN?

This one sells Utica Pliers and Nippers while your back is turned. It contains a case shows a sample boards a complete line of the necessary styles and sizes the most useful of tools known and presents the opportunity of doing a full business with only small expense. No other working tool can use all of these tools and every workman must have some style or size because they do what your hands lack the power to do

Quantity	No.	Size	Price Dozen	Total Price
1	1000	6	$4 80	$4 80
1	1001	8	6 00	6 00
1	1002	10	9 00	9 00
1	1300	6	4 80	4 80
1	1301	7	5 40	5 40
1	1302	8	6 30	6 30
1	1303	10	9 00	9 00
1	4000	6	4 80	4 80
1	4001	5	3 60	3 60
1	4002	6	4 80	4 80
1	4003	7	5 40	5 40
1	4004	8	6 30	6 30
1	50	4	6 00	6 00
1	50	5	7 20	7 20
1	50	6	7 80	7 80
1	50	7	9 00	9 00
2	50	8	10 80	21 60
1	350	6	8 40	8 40
1	350	7	9 60	9 60
1	350	8	11 00	11 00
2	1000	6	15 00	30 00
2	1001	7	12 00	24 00
2	1002	8	15 00	30 00
1	1303	10	11 00	11 00
1	301	6	10 80	10 80
1	3101	7	12 40	13 40
1	3102	8	16 20	16 20
1	1003	5	6 00	6 00
1	1304	10	12 00	12 00
1	4005	5	13 20	10 40
1	124	4	7 80	7 80
1	4006	5	9 00	9 00
1	4007	5	10 80	9 80
1	325	6	6 00	6 00
1	325	5	7 20	7 20
1	3	5	8 40	8 40
1	42	3	4 80	4 80
1	42	4	6 00	6 00
1	42	5	9 60	9 60
1	42	5	12 00	12 00
1	42	6	13 80	13 80
1	42	6	15 00	15 00



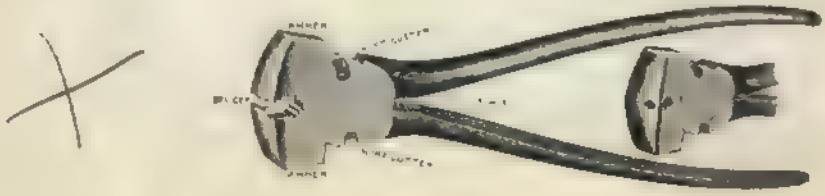
Description of Case—Height, 42 inches; width, 26 inches. Made of golden oak, with yellow birch sample boards. Heavy glass doors, fitted with Corbin locks [illegible] protected by paneled [illegible] fished to sample boards [illegible] each tool showing numb[illegible]

Conditions of Assortment S[illegible] Nippers stock for this case. It is loaned with [illegible] condition that only Utica tools are [illegible] thereon, and it is distinctly understood as a condition [illegible] ment sale that the full line of samples be shown on sample boards at all times and that the fixed prices be [illegible] or the Utica Drop Forge & Tool Co. can [illegible] case from store at their discretion.

Quantity	No.	Size	Price Dozen	Total Price
1	[illegible]	3	$7 20	$7 20
1	[illegible]	4	7 80	7 80
1	[illegible]	4	8 40	8 40
1	[illegible]	5	9 00	9 00
	[illegible]	5	7 20	7 20
1	[illegible]	6	8 40	8 40
1	[illegible]	7	9 60	9 60
1	[illegible]	8	11 40	11 40
1	[illegible]	8	8 40	8 40
	[illegible]	8	9 60	9 60
1	[illegible]	7	10 80	10 80
1	[illegible]	8	12 00	12 00
	[illegible]	7	9 00	9 00
	[illegible]	4	4 80	4 80
	[illegible]	5	6 00	6 00
1	[illegible]	4	4 80	4 80
	[illegible]	4	4 80	4 80
	[illegible]	5	6 00	6 00
1	[illegible]	5	4 80	4 80
1	[illegible]	4	4 80	4 80
1	[illegible]	5	6 00	6 00
1	[illegible]	5	4 80	4 80
1	[illegible]	5	6 00	6 00
1	[illegible]	6	7 20	7 20
2	[illegible]	6	14 40	14 40
1	[illegible]	6	7 20	7 20
1	[illegible]	6	8 40	8 40
1	[illegible]	5	6 00	6 00
1	[illegible]	6	7 20	7 20
1	[illegible]	6	8 40	8 40
1	[illegible]	10	12 00	12 00
1	[illegible]	10	14 40	14 40
1	[illegible]	8	9 60	9 60
2	[illegible]	7	17 40	17 40

89 tools $843 60
☆ of $843.60 ..... 70 30

ORIGINAL RUSSELL STAPLE PULLER



No. 1909. Utica finish. 10 in.....per dozen, $12 00

PLIERS

UTICA LINEMAN'S HEAVY SIDE CUTTING PLIER

No. 1950. Utica finish In.. 6 7 8 *9
Per dozen $10 20 12 00 15 00 21 00

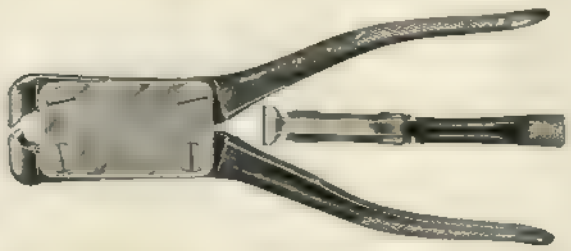
UTICA BULLDOG END CUTTING NIPPER

No. 60. Utica finish. In..... 5 6 7 8
Per dozen $8 40 9 60 10 80 12 60

UTICA JEWELER'S END CUTTING NIPPER

No. 65. Utica finish In. 3½ 4 4½ 5
Per dozen $7 20 7.80 8 40 9 00

UTICA COMPOUND END CUTTING NIPPER



No. 3. Utica finish In. 4½ 5½ 7 *9
Per dozen $12 00 13 80 17 40 21.00

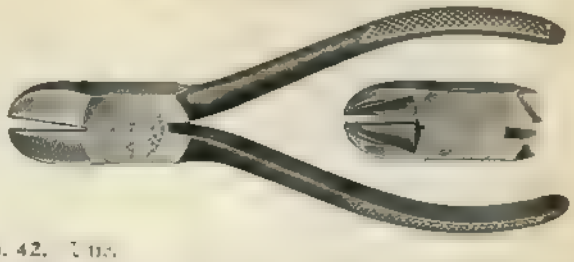
UTICA STOP JOINT BUTTON'S PLIER

No. 3000. Black finish. In. 4½ 6 8 10
Per dozen $3.00 4.00 4.80 6.00

Carried in a box, six boxes in a container

*Sizes marked * are not carried in stock

UTICA DIAGONAL PLIER



No. 42. Utica finish. In. *3½ 4 *4½ 5 *5½ 6 *6½
Per dozen $8 40 9.00 9.60 10 80 12 00 13 80 15 60

UTICA LONG REACH FLAT NOSE SIDE CUTTING PLIER

No. 650. Utica finish. In. 5½ *6½
Per dozen $9.00 12.00

UTICA LONG CHAIN NOSE SIDE CUTTING PLIER

Spring Tempered Nose

No. 654. Utica finish, In. 5½ *6½
Per dozen $9 60 12.00

UTICA MILLINERS' PLIER

No. 024. Utica finish In. 4 5
Per dozen $ 7 80

JEWELERS' LONG NOSE PLIER

Spring Tempered Nose

No. 33. Utica finish, 5½ in., per dozen.....$8 40

See the V
The TRAPPER'S TEST
A reliable trap is as important to the Trapper as a good gun to the Hunter — for the loss of a few furs equals the cost of a whole season's traps.
VICTOR TRAPS
meet every test — are warranted perfect — sure to go, sure to hold.
See the V
ONEIDA COMMUNITY, LTD.
ONEIDA N.Y.

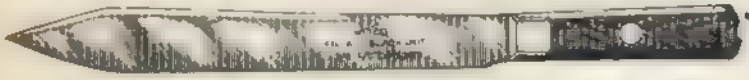
VILLAGE BLACKSMITH KNIVES

No. B225. Bread Knife

Lignum vitae handle, German silver tubular rivets.
8 in. blade, per dozen.....$9.00

No. 70. Bread

Rosewood handle, German silver tubular rivets.
8 in. blade, per dozen.....$11.00



No. 32. Slicer

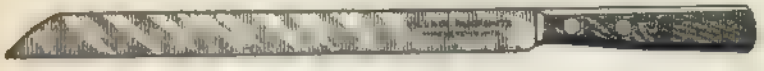
Cocobolo handle, German silver bolster and rivets
10 in. blade, per dozen...$17.00

No. 413. House Knife

Lignum vitae handle, German silver tubular rivets
8 in. blade, per dozen.....$10.40

No. 78. Sandwich Slicer

Ebony handle.
9 in. blade, per dozen.....$9.00



No. S225. Slicer

Lignum vitae handle, German silver tubular rivets.

Blade length, in.	10	12	14
Per dozen	$10.00	14.00	18.00

No. S325. Slicer

Rosewood handle, German silver bolster and rivets

Blade length, in...	10	12	14
Per dozen.....	...$13.00	17.00	21.00

Kitchen Knives

No. K113. Beech handle, per dozen.....$2.10
No. W213. Walnut handle, per dozen.....2.50

No. 350. Bread Knife

Rosewood handle, German silver bolster and rivets
8 in. blade, per dozen.....$11.00

No. 450. Bread Knife

Rosewood handle, German silver tubular rivets
9½ in. long, extra wide, ground thin, per dozen.....$11.00
Specially made for hotel and cafe trade

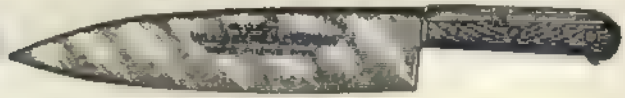
Carvers

Rosewood handle, German silver tubular rivets

No. 550. 5 in. blade, per dozen.....$ 8.00
No. 650. 6 in. blade, per dozen..... 9.00
No. 800. 8 in. blade, per dozen..... 12.00

No. 40. Slicer

Rosewood handle, German silver tubular rivets
10 in. blade, per dozen.....$18.00
For hotel and cafe use



Hotel Chopper

No. 12. Beech handle, 12 in. blade, weight about 2 lbs., per dozen.....$36.00
No. 13. Rosewood handle, 12 in. blade, weight about 2 lbs. per dozen.....36.00

Family Chopper

No. 14. Beech handle, iron rivets, 8 in. blade, weight per dozen about 12 lbs. per dozen.....$ 8.00
No. 15. Cocobolo handle, brass rivets, 8 in. blade, weight about 12 lbs. per dozen, per dozen..... 10.00

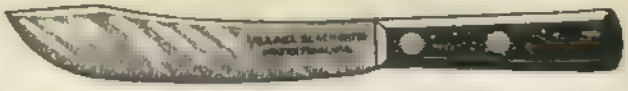
Family Cleavers

Polished walnut handles, large brass rivets.

No. 23. 6 in. blade, weight about 1 lb. each, per dozen.$10.00
No. 33. 7½ in. blade, weight about 1½ lbs. each, per dozen..... 12.00

Packed one half dozen in paper box

VILLAGE BLACKSMITH BUTCHER KNIVES



No. 113. Butcher Knives

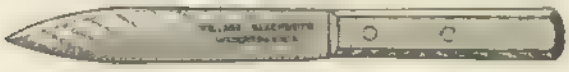
Beech handle, brass tubular rivets

Length, in.	4	5	6	6½	7	7½	8	9
Per dozen	$4 00	4.40	4.80	5.80	6 40	7.10	7.90	9.30

No. 213. Butcher Knives

Walnut handle, brass tubular rivets

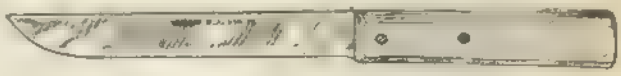
Length, in.	4	5	6	6½	7	7½	8	9
Per dozen	$5.30	5.70	6.10	7.10	7.70	8 40	9.20	10.60



No. ST113. Sticking Knives

Beech handle, two brass tubular rivets

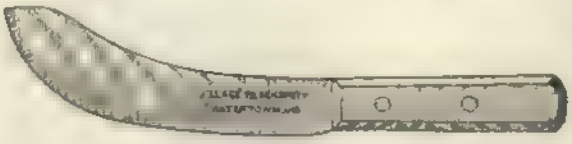
Length, in	5½	6	6½	7
Per dozen	$4 50	4.80	5 80	6.40



No. B113. Boning Knives

Beech handle, two brass tubular rivets.

Length, in	5½	6	6½	7
Per dozen	$5 40	6 10	6 70	7.80



No. SK113. Skinning Knives

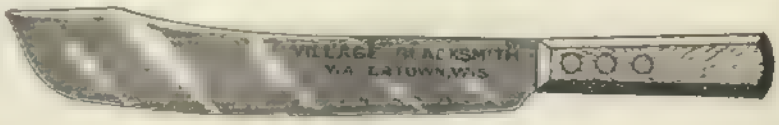
Beech handle, two brass tubular rivets.

Length, in.	4½	5	5¾	6	6½	7
Per dozen	$4 60	5.00	5.40	6.10	6.70	7.80

No. 119. Cimetar Steak Knives

Beech handle, brass tubular rivets.

Length, in.	10	12	14
Per dozen	$17 00	21 00	30.00



No. 113. Steak Knives

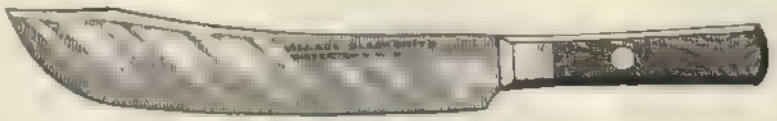
Beech handle, brass tubular rivets.

Length, in.	10	11	12	14	16
Per dozen	$16 00	18.00	20.00	29 00	33.00

No. 213. Steak Knives

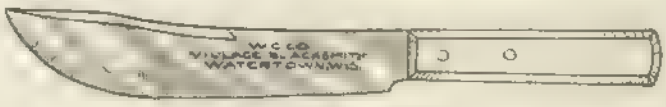
Walnut handle, brass tubular rivets.

Length, in	10	11	12	14	16
Per dozen	$19.00	21.00	23 00	32.00	36 00



Boxwood handle, German silver bolster and rivets

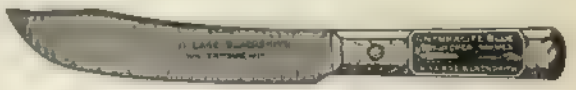
No. 313. Butcher Knives, length in	6	6½	7	7½	8	9	10
Per dozen	$7 30	8.60	9.50	10.20	11.00	13.00	20.00



No. 505. Butcher Knives

Selected boxwood handle, full polished and swedged.

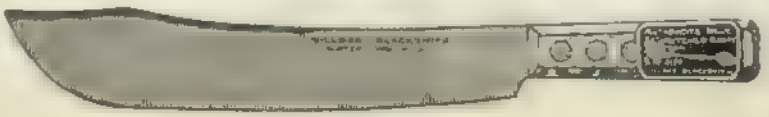
Length, in.	4	5	6	6½	7	7½	8	10
Per dozen	$5.30	5 70	6.10	7.10	7.70	8 40	9.20	10 60



No. 500. Butcher Knives

Selected boxwood handle, blade natural temper color.

Length, in.	6	6½	7	7½	8	9
Per dozen	$7 50	7 80	8.70	9.50	10.25	12.00

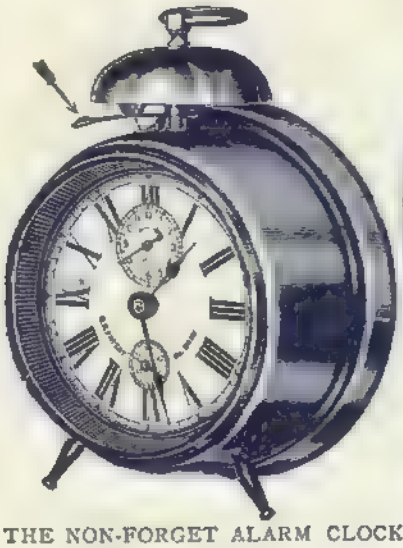


Selected boxwood handle, blades natural temper color.

No. 500. Steak Knives, length in	10	11	12	14
Per dozen	$21.00	24.00	26.00	39.00

FINE IMPORTED ALARM CLOCKS

PRICES EACH



THE NON-FORGET ALARM CLOCK

An alarm clock with an automatic release of the switch for shut-off for the alarm. When the clock is wound the switch releases itself. Four-inch dial. Copper case. Height, 7 inches. (D. R. Patent 124611.)
No. 6179 Each.....$2.30

INTERMITTENT ALARM CLOCK

Wooden case and base, mahogany finish. Height, 7 inches. Embossed celluloid dial 4 inches, Arabic figures. Long intermittent alarm with automatic alarm stop, which is released when winding the clock.
No. 6180 Each $5.10

SWEEP SECOND ALARM CLOCK

Alarm clock with a long sweep second hand from the center and automatic release of the switch for shutting off the alarm. When the clock is wound the switch releases itself. 4-inch dial. Copper case. Height, 8 inches. Movement all through with solid steel cut pinions and solid steel pallet.
No. 6181 Each..... $4.70

Fine Imported Mechanical Alarm Clocks

A Novelty as well as a Reliable and Accurate Timekeeper. Prices Each.

These clocks "in motion" make a splendid show window attraction and sell immediately on sight. Order an assortment at once.

NEGUS ALARM CLOCK

Nickel case. 4-inch Roman or Arabic dial, with negro face and moving eyes. One-day time and alarm.
No. 6182 Each..... $2.55

MECHANICAL ALARM CLOCK

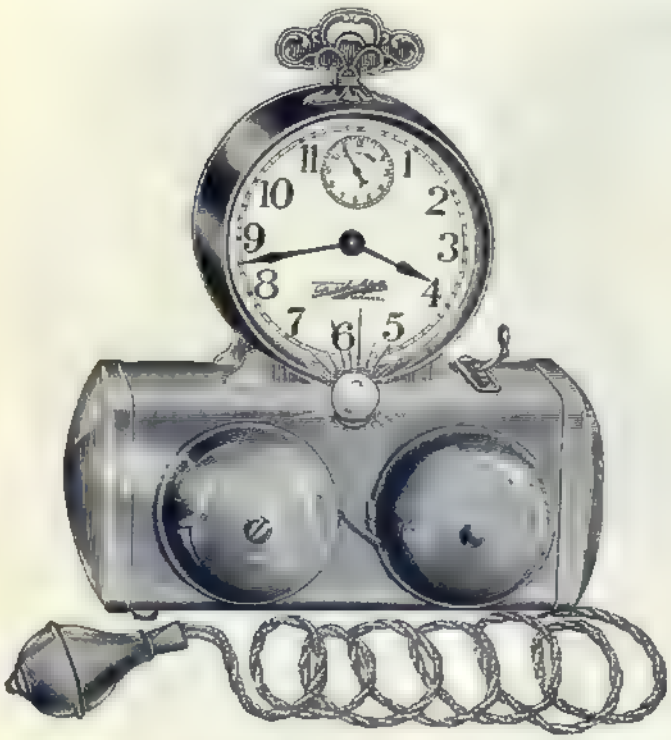
Nickel plated case. Height, 7½ inches. 4-inch dial. Two automatic moving figures as illustrated in assorted styles
No. 6183 Each $3.33

TURNER

Nickel or copper case. Height, 7 inches. One-day time and alarm. The turner performs life-like acrobatic stunts, which are very attractive.
No. 6184 Each..... $4.70

The World's Best Alarm Clock

Searchlight Electric Alarm, Light and Call Clock.



Searchlight Electric Alarm Light and Call Clock. Ready for Use.

The Early Riser's Friend.

Will ring until you get up to stop it.

By touching the metal part of pear push to any part of clock or frame, or pressing end of pear push, will make a fine call bell.

Operated by dry battery, very simple, and no danger of receiving any kind of shock.

Will not get out of order.

The Only Perfect Electric Alarm Clock Made.

A clock that never SLEEPS.

A long push cord is attached to clock and can be used in bed to see the time at night, by pressing pear push at end of cord.

Lamp is guaranteed to give best of satisfaction. The only clock of its kind made.

No wires to clock.

Very noisy. Can be stopped at pleasure.

Height 8 inches, width 3½ inches, length 7 inches. Weight 5 pounds.

POLISHED NICKEL OR COPPER, OXIDIZED FINISH.

No. 6185 Polished Nickel Finish. Each	**$ 6.70**
No. 6186 Copper Oxidized Finish. "	**6.70**

Flash Light Electric Alarm, Call and Bank Clock.

Flash Light Electric Alarm, Call and Bank Clock. Ready for Use.

With stamped steel bank attached, and well made combination for same.

By touching the metal part of pear push to any part of clock or frame, or pressing end of pear push, will make a fine call bell. No danger of any kind of shock.

Everything complete and ready for use

Operated with dry battery. A long push cord is attached to clock, and can be used in bed to see the time at night by pressing pear push at end of cord.

The lamp is guaranteed to give the best of satisfaction, and the only clock of its kind made.

This clock has all the features of the Searchlight Electric Alarm and Call Clock, and alarm will ring until you get up to stop it.

Height 7 inches, length (extreme base) 12⅝ inches, width 5⅜ inches. Weight 8 pounds.

POLISHED NICKEL OR COPPER, OXIDIZED FINISH.

No. 6187 Polished Nickel Finish. Each	**$11.35**
No. 6188 Gun Metal Finish. "	**11.35**

A $25.00 Vacuum Cleaner

YOU CAN SELL FOR

$15.00

Let us send you our FREE illustrated booklets and full particulars about the high grade, high suction power

RUBY VACUUM CLEANER

YOU CAN SELL IT FOR $15.00

and make a big profit. We guarantee it to be superior in suction power and durability to most $25.00 cleaners. It is easy running, attractive in appearance—built for hard service and guaranteed to give perfect satisfaction.

WRITE TODAY FOR ILLUSTRATED MATTER DISCOUNTS, ETC.

AUTOMATIC VACUUM CLEANER CO.

7th STREET

BLOOMINGTON, ILLINOIS

VIOLONCELLOS

Prices quoted do not include Bows.

WITH PEG HEADS.

No. 912 Reddish brown color, good quality.....Each $21 00
No. 914 Reddish brown color, better quality.....Each 23 50
No. 931 Light red color, good quality, inlaid edges.....Each 30 25
No. 932 Reddish brown color, good quality, polished, ebony finger-board.....Each 36 00
No. 943 Light red color, fine quality, polished, ebony finger-board and tailpiece.....Each 48 50
No. 9318 Guarnerius model reddish brown color, polished ebony finger board and tailpiece Each.....53 50
No. 9302 Stradivarius model, German, Italian School, red-brown color, superior quality, highly polished ebony pegs, adjustable brass end pin.....Each 73.50
No. 9350 Stradivarius model, medium red color, highly polished, ebony finger-board and tailpiece.....Each 86.75

WITH PATENT HEADS.

No. 9201 Reddish brown color, fair quality.....Each $24 50
No. 9203 Medium brown color, polished, good quality.....Each 28.50
No. 9215 Reddish brown color, inlaid edges, better quality, brass plates.....Each 34.25
No. 9240 Dark brown color, fine quality, inlaid edges, ebony finger-board, brass plates..Each 36.75
No. 9259 Dark brown color, inlaid edges, superior quality, brass plates.....Each 40.00
No. 9265 Stradivarius model, medium red color, highly polished, ebony trimmed, brass patent heads.....Each 100.00

Fine Genuine Old Violoncellos Carried in Stock.

GERMAN, ITALIAN SCHOOL.

No. 9300 Stradivarius model, red-brown color, fine quality, brass plates, adjustable brass end pin.....Each $63.50

SUPERIOR QUALITY.

Each Instrument Bears the Above Brand.

WITH PEG HEADS.

No. 92080 Amati model, medium amber color varnish, highly polished, curly maple back and sides, full ebony trimmed, extension end pin.....Each $120.00
No. 92082 Stradivarius model, amber color varnish, highly finished, curly maple back and sides, ebony finger-board and tailpiece, cocoa pegs, extension end pin.....Each 170.00

THREE-QUARTER SIZE.

No. 930 Three-quarter size, reddish brown color, polished, inlaid edges, superior quality..Ea. $32.75

DOUBLE BASS

WITH PATENT HEADS. PRICES QUOTED INCLUDE BOWS.

One-Quarter Size.

No. 958 4 strings, dark red, shaded, polished, good quality.....Each $61.50

Half Sizes.

No 960 3 strings, dark red, shaded, polished, good quality.....Each $60.75
No 961 4 strings, dark red, shaded, polished, good quality.....Each 63.25
No 971 4 strings, dark red, shaded, polished, better quality, with ebony finger-board.....Each 74 00
No 965 4 strings, dark red, shaded, polished, inlaid edges, swelled back, fine quality.....Each 98.75

Three-Quarter Sizes.

No. 962 3 strings, dark red, shaded, polished, good quality.....Each $65 75
No. 963 4 strings, dark red, shaded, polished, good quality.....Each 69 00
No. 973 4 strings, dark red, shaded, polished, better quality, with ebony finger-board.....Each 79 75
No. 967 4 strings, dark red, shaded, polished, inlaid edges, fine quality.....Each 84 25
No. 974 4 strings, dark red, shaded, polished, inlaid edges, fine quality, with ebony finger-board.....Each 94 75
No. 969 4 strings, dark red, shaded, polished, inlaid edges, swelled back, fine quality.....Each 107 25

GERMAN, ITALIAN SCHOOL.

Three-Quarter Size.

No 975 4 strings, dark brown color swelled back, ebony finger-board and tailpiece, extra fine quality, brass patent head (for artists) Each.....$214.75

Full (4/4) Size.

No 976 4 strings dark brown amber shaded, inlaid edges, swelled back, reinforced sides, brass patent heads, excellent quality best ebony finger-board.....Each $255.75

We do not warrant Double Basses against checking or warping.

VIOLINS

In the following list will be found all the popular quick-selling styles of Violins on the market, including a large number of models that cannot be obtained elsewhere. Every model, color and quality of tone for which a demand exists is represented. Dealers can rest assured that these instruments will give lasting satisfaction to their patrons and they may be spoken of in terms of highest commendation.

Prices quoted do not include Bows.

GERMAN.

No. 913 Fine shaded back, good model and finish.....Each $ 5.00
No. 914 Red color, shaded, good model and finish, inlaid edges.....Each 5.75
No. 937 Reddish brown color, not shaded, varnish finish, inlaid edges.....Each 7.00
No. 941 Kohler Model, handsome red color, shaded, highly polished.....Each 7.25
No. 939 Salzard Model, dark red color, polished, inlaid edges.....Each 7.50

HOPF MODEL.

No. 9109 Brown color, good quality, inlaid edges.....Each $ 5.50
No. 937 Brown color polished inlaid edges, better quality.....Each .25
No. 935 Brown color, polished finish, swelled top and back.....Each 8.25
No. 964 Brown color, polished finish, swelled top and back, with ebony finger-board and tail piece.....Each 10.00

STAINER MODEL.

No. 944 Light brown color, shaded, flamed back and neck, highly polished.....Each $ 7.25
No. 9171 Medium red color, shaded, pearl inlaid tail piece.....Each 7.50
No. 948 Amber color, shaded, pearl inlaid tail piece, highly polished.....Each 7.50
No. 9390 Amber color, shaded, good model and finish, ebony finger-board, etc. Each 8.25
No. 9442 Light red color shaded, highly polished, ebony finger-board, etc.....Each 10.75
No. 9405 Reddish brown color, highly polished, ebony finger-board and tail piece Each 12.00
No. 9394 Light brown color, finely shaded, high polish finish, full ebony trimmed Each 12.50
No. 9396 Dark brown color, highly polished, deep edges, fine model, full ebony trimmed Each 12.75
No. 9398 Ruddy red color, high polish finish, fine model, good workmanship, full ebony trimmed.....Each 14.25
No. 9200 Dark amber color, high finish, ebony finger-board and tail piece Each 15.75

WITH EBONY FINGER-BOARDS, ETC.

No. 970 Reddish brown color, shaded, highly polished.....Each $ 6.25
No. 974 Brown and amber color, shaded, highly polished Each 7.00
No. 9420 Reddish brown color, shaded, high varnish finish.....Each 8.00
No. 9422 Reddish brown color, highly polished, good finish.....Each 7.75
No. 9431 Light brown color, polished and shaded, well finished Each 9.25

All Orders Filled Same Day Received - - No Delay.

With Ebony Finger-Boards, Etc., Continued.

No. 9500 Ole Bull Model, brown color, dull finish.....Each $11.50
No. 966 Russian Model, dark red color, shaded, highly polished, rounded edges, ebony finger-board and tail piece Each 10.75
No. 9719 Amati Model, full dark amber color, high polish, ebony finger-board etc. Each 11.25
No. 9506 Vuillaume Model, high amber color, shaded, highly polished, ebony finger-board, etc.....Each 11.75
No. 9174 Salzard Model, dark red color, polished.....Each 13.25
No. 9323 Amati Model, good copy of old with reproduction of cracks, abrasions etc., full ebony trimmed. Each 15.00
No. 9914 Amati model, dark amber color, light edges, highly finished.....Each 15.75

HIGH-GRADE VIOLINS FOR PROFESSIONAL USE.

THE CELEBRATED ARTISTO VIOLINS.

No. 9850 F Breton Model, fine red amber color, high polish finish, ebony pegs, finger-board and tail piece.....Each $16.75
No. 9854 Stradivarius Model, fine amber colored varnish, highly finished, ebony pegs, ebony finger-board and tail piece Each 20.00
No. 9856 Stradivarius Model, dark brown color, slightly shaded, highly polished finish, light edges, ebony pegs, ebony finger-board and tail-piece.....Each 23.25
No. 9858 Maggini Model, medium red amber color, double row purfling, highly polished and finished, full ebony trimmed. Each 27.50
No. 9860 Guarnerius Model, reddish amber color, highly polished and finished, fine pattern, gilt mounted pegs, full ebony trimmed.....Each 34.25
No. 9862 Stradivarius Model, ruddy red color, highly polished, elegant finish, fine flamed back, full ebony trimmed Each. 40.75
No. 9864 Amati Model, fine amber color, highly polished and finished, artistic rounded edges, pearl inlaid tail piece and pegs, full ebony trimmed.. Each. 50.75
No. 9866 Maggini Model, orange amber color, double rows of purfling, fine pattern, highly polished and finished, fine flamed back, full ebony trimmed.....Each 57.50
No. 9868 Stradivarius Model, grand pattern, amber color, highly polished and finished, high grade workmanship, beautiful flamed back, full ebony trimmed Each 74.25

SEVEN-EIGHTHS SIZE. (LADIES' VIOLINS.)

No. 9208 Ladies' Violin, reddish brown color, shaded, oil varnished, ebony finger-board and tail piece Each $15.50
No. 9209 Ladies' Violin, reddish brown color, shaded, oil varnished, fine quality ebony finger-board and tail piece Each 20.00

THREE-QUARTER SIZE.

No. 9103¾ Red and amber shaded, good model and finish.....Each 6.75
No. 9171¾ Light brown color, shaded, good model and finish, ebony finger-board and tail piece Each 8.25
No. 9[illegible]¾ German Italian School, dark brown color, good model and finish, plain trimmings.....Each 9.00
No. 9801¾ German Italian School, dark brown color, fine model and finish.....Each 10.50
No. 9[illegible]¾ Stradivarius Model, light amber color, shaded, ebony finger-board, etc.....Each 9.50
No. 9413¾ Red color, good model and finish, ebony finger-board and tail piece.....Each 11.25
No. 9[illegible]¾ Brown shaded, fine model, ebony finger-board and tail piece.....Each 14.50
No. 9[illegible]¾ Stradivarius model, medium red color, shaded, highly polished ebony finger-board and tail piece Each 16.75
No. 9213¾ German Italian School, medium brown color fine model and tone, ebony finger-board and tail piece. Each 19.25
No. 9[illegible]¾ Amati model, brown amber color, highly polished, full ebony trimmed.....Each 25.75
No. 9[illegible]¾ Johann Ferd Pfretzschner, high amber varnish finish, flamed back and sides, full ebony trimmed.....Each 30.75
No. 9[illegible]¾ Johann Ferd Pfretzschner Amati model high amber varnish finish, flamed back and sides ebony trimmed rosewood pegs Each 40.75

HALF SIZE.

No. 9191½ Red and amber shaded, good model and finish.....Each $6.50
No. 9211½ Light brown color, shaded, good model and finish, ebony finger-board and tail piece.....Each 8.25
No. 9[illegible]½ German Italian School, dark brown color, good model and finish Each 8.75
No. 9801½ German Italian School, dark brown color, fine model and finish Each 9.50
No. 9413½ Brown shaded, fine model, ebony finger-board and tail piece.....Each 13.25
No. 9[illegible]½ Stradivarius model, amber color, shaded, highly polished, ebony finger-board and tail piece.....Each 15.50
No. 9213½ Stradivarius model, amber medium brown color, fine model and tone, full ebony trimmed.....Each 17.50
No. 9[illegible]½ Amati model, brown amber color, highly polished, full ebony trimmed.....Each 25.75

VIOLINS

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GERMAN.

No. 913 Fine shaded back, good model and finish ..... Each $ 5.00
No. 914 Red color, shaded, good model and finish, inlaid edges..... Each 5.75
No. 937 Reddish brown color, not shaded, varnish finish, inlaid edges..... Each 7.00
No. 941 Kohler Model, handsome red color, shaded, highly polished..... Each 7.25
No. 939 Salzard Model, dark red color, polished, inlaid edges..... Each 7.50

HOPF MODEL.

No. 9109 Brown color, good quality, inlaid edges ..... Each $ 5.50
No. 937 Brown color, polished, inlaid edges, better quality..... Each 6.25
No. 935 Brown color, polished finish, swelled top and back..... Each 8.25
No. 964 Brown color, polished finish, swelled top and back, with ebony finger-board and tail piece..... Each 10.00

STAINER MODEL.

No. 944 Light brown color, shaded, flamed back and neck, highly polished..... Each $ 7.25
No. 9171 Medium red color, shaded, pearl inlaid tail piece..... Each 7.50
No. 948 Amber color, shaded, pearl inlaid tail piece, highly polished..... Each 7.50
No. 9390 Amber color, shaded, good model and finish, ebony finger-board, etc. Each 8.25
No. 9442 Light red color shaded, highly polished, ebony finger-board, etc..... Each 10.75
No. 9405 Reddish brown color, highly polished, ebony finger-board and tail piece Each 12.00
No. 9394 Light brown color, finely shaded, high polish finish, full ebony trimmed Each 12.50
No. 9396 Dark brown color, highly polished, deep edges, fine model, full ebony trimmed ..... Each 12.75
No. 9398 Ruddy red color, high polish finish, fine model, good workmanship, full ebony trimmed ..... Each 14.25
No. 9200 Dark amber color, high finish, ebony finger-board and tail piece . Each 15.75

WITH EBONY FINGER-BOARDS, ETC.

No. 970 Reddish brown color, shaded, highly polished ..... Each $ 6.25
No. 974 Brown and amber color, shaded, highly polished ..... Each 7.00
No. 9420 Reddish brown color, shaded, high varnish finish..... Each 8.00
No. 9422 Reddish brown color, highly polished, good finish..... Each 7.75
No. 9431 Light brown color, polished and shaded, well finished.. Each 9.25

All Orders Filled Same Day Received - - No Delay.

With Ebony Finger-Boards, Etc., Continued.

No. 9500 Ole Bull Model, brown color, dull finish ..... Each $11.50
No. 966 Russian Model, dark red color, shaded, highly polished, rounded edges, ebony finger-board and tail piece Each .0 75
No. 9719 Amati Model, full dark amber color, high polish, ebony finger-board etc Each 11.25
No. 9506 Vuillaume Model, high amber color, shaded, highly polished, ebony finger-board, etc. ..... Each 11.75
No. 9174 Salzard Model, dark red color, polished ..... Each 13.25
No. 9323 Amati Model, good copy of old with reproduction of cracks, abrasions etc., full ebony trimmed. Each 15.00
No. 9914 Amati model, dark amber color, light edges, highly finished..... Each 15.75

HIGH-GRADE VIOLINS FOR PROFESSIONAL USE.

THE CELEBRATED ARTISTO VIOLINS.

No. 9850 F Breton Model, fine red amber color, high polish finish, ebony pegs, finger-board and tail piece..... Each $16.75
No. 9854 Stradivarius Model, fine amber colored varnish, highly finished, ebony pegs, ebony finger-board and tail piece Each 20.00
No. 9856 Stradivarius Model, dark brown color, slightly shaded, highly polished finish, light edges, ebony pegs, ebony finger-board and tail-piece..... Each 23.25
No. 9858 Maggini Model, medium red amber color, double row purfling, highly polished and finished, full ebony trimmed. Each ... 27.50
No. 9860 Guarnerius Model, reddish amber color, highly polished and finished, fine pattern, gilt mounted pegs, full ebony trimmed ..... Each 34.25
No. 9862 Stradivarius Model, ruddy red color, highly polished, elegant finish, fine flamed back, full ebony trimmed Each. 40.75
No. 9864 Amati Model, fine amber color, highly polished and finished, artistic rounded edges, pearl inlaid tail piece and pegs, full ebony trimmed.. Each 50.75
No. 9866 Maggini Model, orange amber color, double rows of purfling, fine pattern, highly polished and finished, fine flamed back, full ebony trimmed..... Each 57.50
No. 9868 Stradivarius Model, grand pattern, amber color, highly polished and finished, high grade workmanship, beautiful flamed back, full ebony trimmed . Each 74.25

SEVEN-EIGHTHS SIZE. (LADIES' VIOLINS.)

No. 9208 Ladies' Violin, reddish brown color, shaded, oil varnished, ebony finger-board and tail piece . Each $15.50
No. 9209 Ladies' Violin, reddish brown color, shaded, oil varnished, fine quality ebony finger-board and tail piece . Each 20.00

THREE-QUARTER SIZE.

No. 9193/4 Red and amber shaded, good model and finish..... Each 6.75
No. 9217/4 Light brown color, shaded, good model and finish, ebony finger-board and tail piece . . . . . Each 8.25
No. 9[illegible]/4 German Italian School, dark brown color, good model and finish, plain trimmings..... Each 9.00
No. 9801/4 German Italian School, dark brown color, fine model and finish ..... Each 10.50
No. 9[illegible]/4 Stradivarius Model, light amber color, shaded, ebony finger-board, etc. ..... Each 9.50
No. 9413/4 Red color, good model and finish, ebony finger-board and tail piece..... Each 11.25
No. 94[illegible]/4 Brown shaded, fine model, ebony finger-board and tail piece ..... Each 14.50
No. 9[illegible]/4 Stradivarius model, medium red color, shaded, highly polished ebony finger-board and tail piece Each 16.75
No. 9217/4 German Italian School, medium brown color fine model and tone, ebony finger-board and tail piece. Each 19.25
No. 9[illegible]/4 Amati model, brown amber color, highly polished, full ebony trimmed ..... Each 25.75
No. 9[illegible]/4 Johann Ferd Pfretzschner, high amber varnish finish, flamed back and sides, full ebony trimmed..... Each 30.75
No. 9[illegible]/4 Johann Ferd Pfretzschner Amati model high amber varnish finish, flamed back and sides ebony trimmed rosewood pegs Each 40.75

HALF SIZE.

No. 9191/2 Red and amber shaded, good model and finish..... Each $6.50
No. 9217/2 Light brown color, shaded, good model and finish, ebony finger-board and tail piece..... Each 8.25
No. 9[illegible]/2 German Italian School, dark brown color, good model and finish ..... Each 8.75
No. 9801/2 German Italian School, dark brown color, fine model and finish ..... Each 9.50
No. 9413/2 Brown shaded, fine model, ebony finger-board and tail piece ..... Each 13.25
No. 9[illegible]/2 Stradivarius model, amber color, shaded, highly polished, ebony finger-board and tail piece..... Each 15.50
No. 9217/2 Stradivarius model, amber medium brown color, fine model and tone, full ebony trimmed..... Each 17.50
No. 9[illegible]/2 Amati model, brown amber color, highly polished, full ebony trimmed ..... Each 25.75

VIOLONCELLOS

Prices quoted do not include Bows.

WITH PEG HEADS.

No. 912 Reddish brown color, good quality.....Each $21 00
No. 914 Reddish brown color, better quality.....Each 23 50
No. 931 Light red color, good quality, inlaid edges.....Each 30 25
No. 932 Reddish brown color, good quality, polished, ebony finger-board.....Each 36 00
No. 943 Light red color, fine quality, polished, ebony finger-board and tailpiece.....Each 48 50
No. 9318 Guarnerius model reddish brown color, polished ebony finger board and tailpiece Each.....53 50
No. 9302 Stradivarius model, German, Italian School, red-brown color, superior quality, highly polished ebony pegs, adjustable brass end pin.....Each 73.50
No. 9350 Stradivarius model, medium red color, highly polished, ebony finger-board and tailpiece.....Each 86.75

WITH PATENT HEADS.

No. 9201 Reddish brown color, fair quality.....Each $24 50
No. 9203 Medium brown color, polished, good quality.....Each 28.50
No. 9215 Reddish brown color, inlaid edges, better quality, brass plates.....Each 34.25
No. 9240 Dark brown color, fine quality, inlaid edges, ebony finger-board, brass plates..Each 36.75
No. 9259 Dark brown color, inlaid edges, superior quality, brass plates.....Each 40.00
No. 9265 Stradivarius model, medium red color, highly polished, ebony trimmed, brass patent heads.....Each 100.00

Fine Genuine Old Violoncellos Carried in Stock.

GERMAN, ITALIAN SCHOOL.

No. 9300 Stradivarius model, red-brown color, fine quality, brass plates, adjustable brass end pin.....Each $63.50

SUPERIOR QUALITY.

Each Instrument Bears the Above Brand.

WITH PEG HEADS.

No. 92080 Amati model, medium amber color varnish, highly polished, curly maple back and sides, full ebony trimmed, extension end pin.....Each $120.00
No. 92082 Stradivarius model, amber color varnish, highly finished, curly maple back and sides, ebony finger-board and tailpiece, cocoa pegs, extension end pin.....Each 170.00

THREE-QUARTER SIZE.

No. 930 Three-quarter size, reddish brown color, polished, inlaid edges, superior quality..Ea. $32.75

DOUBLE BASS

WITH PATENT HEADS. PRICES QUOTED INCLUDE BOWS.

One-Quarter Size.

No. 958 4 strings, dark red, shaded, polished, good quality.....Each $61.50

Half Sizes.

No 960 3 strings, dark red, shaded, polished, good quality.....Each $60.75
No 961 4 strings, dark red, shaded, polished, good quality.....Each 63.25
No 971 4 strings, dark red, shaded, polished, better quality, with ebony finger-board.....Each 74 00
No 965 4 strings, dark red, shaded, polished, inlaid edges, swelled back, fine quality.....Each 98.75

Three-Quarter Sizes.

No. 962 3 strings, dark red, shaded, polished, good quality.....Each $65 75
No. 963 4 strings, dark red, shaded, polished, good quality.....Each 69 00
No. 973 4 strings, dark red, shaded, polished, better quality, with ebony finger-board.....Each 79 75
No. 967 4 strings, dark red, shaded, polished, inlaid edges, fine quality.....Each 84 25
No. 974 4 strings, dark red, shaded, polished, inlaid edges, fine quality, with ebony finger-board.....Each 94 75
No. 969 4 strings, dark red, shaded, polished, inlaid edges, swelled back, fine quality.....Each 107 25

GERMAN, ITALIAN SCHOOL.

Three-Quarter Size.

No 975 4 strings, dark brown color swelled back, ebony finger-board and tailpiece, extra fine quality, brass patent head (for artists) Each.....$214.75

Full (4/4) Size.

No 976 4 strings dark brown amber shaded, inlaid edges, swelled back, reinforced sides, brass patent heads, excellent quality best ebony finger-board.....Each $255.75

We do not warrant Double Basses against checking or warping.

VIOLIN BOWS

No. 9167.

Nos. 933-935

Your son or daughter will highly appreciate the gift of a musical instrument, which will broaden their knowledge, brighten and comfort your home. No home should be without an instrument of some description, which can be selected from this Catalog at the lowest price.

No. 9205	Maple, red painted, ebony frog, inlaid dot, bone slide and button	Each	$1 10
No. 9250	Maple, black finished, bone frog, inlaid eye, bone slide and button	Each	1 25
No. 9280	Maple, dark red finish, ebony frog, inlaid dot, pearl slide, German silver and ebony button	Each	1 25
No. 9287	Maple, imitation snakewood, ebony frog, inlaid dot, pearl slide, German silver button	Each	1 30
No. 9295	Brazil wood, natural color, ebony frog, inlaid dot, pearl slide, bone button	Each	1 60
No. 9264	Cherry finish stick, ebony frog, German silver full lined, pearl slide, pearl eye, button of German silver and ebony veneered grip	Each	1 70
No. 921	Brazil wood, ebony frog, pearl inlaid dot, pearl slide, German silver button	Each	1 85
No. 9278	Brazil wood, ebony frog, pearl inlaid dot, pearl slide, German silver button, very broad frog	Each	2 15
No. 9459	"L. Wenzel" Brazil wood, leather grip, ebony frog, pearl slide, pearl eye, German silver lined, German silver button	Each	2.00
No. 9460	"L. Wenzel" Brazil wood, leather grip, ebony frog, pearl slide, pearl eye, full German silver lined, German silver button	Each	2 20
No. 929	"Tourte," Brazil wood, octagon stick, ebony frog, pearl inlaid eye, pearl slide, German silver lined, German silver button	Each	2 45
No. 9147	Brazil wood, ebony frog, full German silver lined, German silver and ebony button, brown, full leather grip	Each	2 55
No. 9264	"Bausch," Brazil wood, ebony frog, pearl eye, pearl slide, full German silver lined, German silver button, leather grip	Each	2 95
No. 926	"Vuillaume," Brazil wood, ebony frog, double pearl eye, pearl slide, full German silver lined, German silver button, leather grip	Each	3.10
No. 9[illegible]	Brazil wood, imitation snakewood, imitation ivory frog and button, double pearl eye, German silver lined	Each	3.25
No. 935	Genuine snakewood, ivory frog, double pearl eye, German silver lined, ivory button	Each	6 5
No. 9[illegible]	"Remenji," Brazil wood, dark color, ebony frog, double pearl eye, pearl slide, full German silver lined, German silver button, leather grip	Each	3 65

HALF SIZE.

No. 918	Brazil wood, ebony frog, leather grip, inlaid dot, pearl slide, bone button	Each	$1 65
No. 924	Brazil wood, ebony frog, leather grip, inlaid dot, pearl slide, German silver button, better quality	Each	1 80
No. 921	"L. Wenzel," Brazil wood, ebony frog, pearl slide, pearl eye, full German silver lined, German silver button	Each	2 10
No. 926	Pernambuco wood, ebony frog, pearl eye, full German silver lined, pearl slide, German silver button	Each	3 65
No. 928	Pernambuco wood, ebony frog, pearl eye, full German silver lined, pearl slide, extra fine quality	Each	5.60

THREE-QUARTER SIZE.

No. 930	Brazil wood, ebony frog, leather grip, inlaid dot, pearl slide, bone button	Each	$1.65
No. 936	Brazil wood, ebony frog, leather grip, inlaid dot, pearl slide, German silver button, better quality	Each	1 85
No. 931	"L. Wenzel" Brazil wood, ebony frog, pearl slide, pearl eye, full German silver lined, German silver button	Each	2 25
No. 937	Pernambuco wood, ebony frog, full German silver lined, pearl slide, German silver button	Each	3 65
No. 938	Pernambuco wood, ebony frog, full German silver lined, pearl slide, extra fine quality	Each	5 85

VIOLONCELLO BOWS

No. 9440.

We insure safe delivery on all musical goods. No fear or hesitation necessary. All orders filled promptly upon receipt.

No. 9117	Maple, imitation snakewood, ebony frog, inlaid dot, slide and button	Each	$1.45
No. 915	Brazil wood, plain ebony frog, bone button, good quality	Each	2.00
No. 919	Brazil wood, ebony frog, inlaid dot, pearl slide, bone button	Each	2.20
No. 9122	Brazil wood, ebony frog, pearl eye, pearl slide, German silver button	Each	2.40
No. 926	Brazil wood, ebony frog, double pearl eye, full German silver lined, pearl slide, German silver button	Each	3 45
No. 9472	"Tourte" Pernambuco wood, octagon stick, ebony frog, pearl eye, full German silver lined, pearl slide, German silver button	Each	7 65
No. 996	"Vuillaume a Paris" Pernambuco wood, ebony frog, double pearl eye, full German silver lined, pearl slide, German silver button	Each	5.85
No. 9440	"L. Bausch, Leipzig," Pernambuco wood, ebony frog, double pearl eye, full German silver lined, pearl slide, German silver button	Each	11.00

MANDOLINS

No. 9602

No. 91208 9 ribs, maple and walnut, inlaid sound-hole, tortoise celluloid guard plate, walnut finger-board, position dots, nickel-covered tail piece ..... Each $5.25

No. 91210 9 ribs, mahogany and walnut white inlay between, inlaid sound-hole, black celluloid guard plate, inlaid, cedar neck, rosewood finger-board, pearl position dots, nickel-covered tail piece ..... Each 7.00

No. 91211 11 ribs, dark mahogany finish, with black inlaying between, broad wood inlaying around sound-hole and edges, celluloid bound, hand rubbed, spruce top, solid mahogany neck, ebonized finger-board, ebony celluloid guard plate, pearl position dots, nickel-plated head, shell tail piece..... Each 9.50

No. 91216 21 rosewood ribs, white inlay between, inlaid edges, bound with pearl and ebony cord pattern, pearl inlaid sound-hole, rosewood edge, tortoise celluloid guard plate, pearl butterfly inlaid, cedar neck, rosewood veneered head piece, ebony finger-board, pearl position dots, nickel-covered tail piece..... Each 10.75

No. 91212 17 ribs, solid rosewood, full apron, natural colored mahogany neck, sound-hole and edges bound with fancy colored wood inlaying and white celluloid, handsomely inlaid guard plate, ebonized finger-board, pearl position dots, rosewood veneered head piece, shell pattern, metal tail piece ..... Each 13.75

No. 91214 17 ribs, bird's-eye maple and rosewood, full apron, natural finish, mahogany neck, spruce top, tortoise celluloid guard plate, neatly inlaid with butterfly, edges of apron, face and sound-hole neatly bound with attractively colored celluloid, handsomely colored variegated wood inlaying around sound-hole and edges, ebonized finger-board, inlaid with pearl position dots, rosewood veneered head piece, inlaid with fancy wood inlaying, aluminum sliding tail piece, neatly engraved, covered German silver patent heads, full engraved..... Each 22 25

No. 91218 21 rosewood ribs, white inlay between inlaid edges, pearl inlaid sound-hole, rosewood edge. Tortoise celluloid guard plate, pearl butterfly inlaid. Cedar neck, rosewood veneer head-piece. Solid pearl inlaid finger-board, nickel covered tail piece, N. P patent heads Each 17 50

THE SALIENT FEATURES OF OUR MANDOLINS ARE:

1. Thoroughly seasoned material insuring durability.
2. Highest class of workmanship throughout.
3. Every finger-board mathematically correct.
4. Superior tone quality arising from acoustically correct model
5. Smooth working patent heads with no "lost motion," i. e., the slightest turn of the screw is effective.

AMERICAN MAKE MANDOLINS.

No. 9501 9 ribs, dark mahogany finish, with black inlaying between, broad fancy colored wood inlaying around sound-hole and edge, celluloid bound, high varnish finish, spruce top, mahogany finish neck, rosewood finger-board and torttoise celluloid guard plate, pearl position dots, our own make nickel-plated patent head, nickel shell pattern tail piece..... Each 8.25

No. 9502 9 ribs of solid mahogany, with black inlaying between, extended rosewood apron, high varnish finish, broad fancy colored wood inlaying around sound-hole and edge, celluloid bound, spruce top, mahogany finish neck, rosewood finger-board and tortoise celluloid guard plate, pearl position dots, our own make nickel-plated patent head, nickel shell pattern tail piece ..... Each 9.25

No. 9503 9 ribs of rosewood and maple, with red inlaying between, extended rosewood apron, hand polished broad fancy colored wood inlaying around sound-hole edge inlaid with colored inlaying and celluloid bound spruce top mahogany finish neck, veneered head piece, rosewood finger-board and tortoise celluloid guard plate, pearl position dots, our own make nickel plated patent head, nickel shell pattern tail piece..... Each 11.75

No. 9601 9 ribs of rosewood with white inlaying between, hand polished, broad fancy colored wood inlaying around sound-hole, edge inlaid with fancy colored corded inlaying and celluloid bound fancy inlaid tortoise celluloid guard plate mahogany neck veneered head piece, rosewood finger-board, pearl position dots, our own make nickel plated patent head, nickel plated combined wrist rest and tail piece..... Each 14.25

No. 9602 11 ribs of rosewood, white inlaying between, hand polished, broad fancy colored corded inlaying around sound hole edge inlaid with broad fancy colored corded inlaying and celluloid bound, tortoise celluloid guard plate with neat inlaid design of celluloid and pearl, mahogany neck, rosewood veneered head piece, rosewood finger-board, pearl position dots, our own make nickel plated patent head, nickel plated combined wrist rest and tail piece ..... Each 14.75

No. 9607 15 ribs of rosewood white inlay between, hand polished broad fancy colored corded inlaying around sound hole and edge, celluloid bound edge and apron, tortoise celluloid guard plate handsomely white inlaid, mahogany neck rosewood veneered head piece, ebony finger-board, pearl position marks, our own make nickel plated patent head, nickel plated combined wrist rest and tail piece ..... Each 16.75

No. 9604 22 ribs of rosewood, with white inlay between hand polished extra broad fancy colored corded inlaying around sound-hole and edge, celluloid bound edge and apron, tortoise celluloid guard plate, with fancy inlaid design mahogany neck fancy scroll head rosewood veneered, ebony finger board celluloid bound, fancy pearl position marks our own make nickel plated patent head, nickel plated combined wrist rest and tail piece..... Each 20.75

No. 9605 26 ribs of rosewood, with white inlay between, beautifully hand polished, extra broad fancy colored inlaying around sound-hole and edge, celluloid bound sound hole, edge and apron, tortoise celluloid guard plate, with fancy pearl inlaid design, mahogany neck, fancy scroll head ebony veneered ebony finger-board celluloid bound fancy pearl position marks, our own make nickel plated patent head, nickel plated combined wrist rest and tail piece ..... Each 28.50

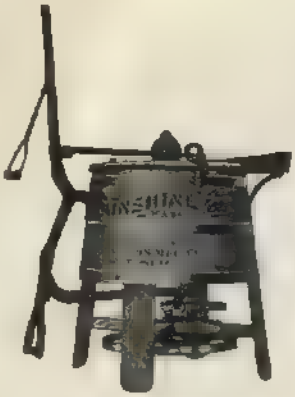
No. 9606 35 ribs of rosewood, with white inlay between beautifully hand polished, fancy pearl inlaying around sound-hole, fancy broad colored inlaying around edge, sound hole, edge and apron bound with celluloid, tortoise celluloid guard plate with fancy pearl inlaid design, mahogany neck, fancy scroll head ebony veneered, ebony finger-board celluloid bound, fancy pearl engraved position marks our own nickel plated covered patent head, nickel plated combined wrist rest and tail piece ..... Each 45.25

No. 9607 43 ribs of rosewood with white inlay between, beautifully hand polished, fancy pearl inlaying around sound hole and edge, celluloid bound sound hole, edge and apron tortoise celluloid guard plate with fancy pearl inlaid design, mahogany neck, fancy scroll head, ebony veneered, inlaid with pearl ebony finger board, celluloid bound, fancy pearl engraved position marks our own make nickel plated covered patent head nickel plated combined wrist rest and tail piece ..... Each 55.75

12-STRING MANDOLINS.

No. 91502 12 strings 9 ribs of solid mahogany, with black inlaying between, extended rosewood apron, high varnish finish, broad fancy colored wood inlaying around sound-hole and edge celluloid bound, spruce top mahogany finish neck, rosewood finger board and tortoise celluloid guard plate, pearl position dots, our own make nickel plated patent head, nickel plated shell pattern tail piece. Each..... 12.00

No. 91603 12 strings 15 ribs of rosewood, white inlay between hand polished, broad fancy colored corded inlaying around sound-hole and edge, celluloid bound edge and apron, tortoise celluloid guard plate handsomely white inlaid, mahogany neck, rosewood veneered head piece, ebony finger-board pearl position marks, our own make nickel plated patent head, nickel plated combined wrist rest and tail piece..... Each 18.25



Give your customers an opportunity to buy **"Ocean Wave"** and **"Sunshine" Washers,** and they will show their loyalty to you and their appreciation of quality by placing their orders with you.

Prices and complete information sent on request.

VOSS BROS. MFG. CO.
DAVENPORT, IOWA

THE MAYTAG POWER WASHER

With swinging wringer; two operations; washing and rinsing at the same time with the same power; a time saver for the women; a great selling feature and one of rare merits.

Instead of a stationary wringer or where clothes are run back on top of the machine, we swing it around into any desired position. Write us today.

THE MAYTAG CO.
240 North St. NEWTON IOWA

You Can Clean Up Good Profits

THE UNPRECEDENTED SUCCESS of our electric washer, the universal favor with which it has been received by the public, has encouraged us to put forth a type of washing machine to meet the growing demand for a power washer to be driven with a gas engine or from a line shaft. We have named washers of this type

GEM POWER WASHERS

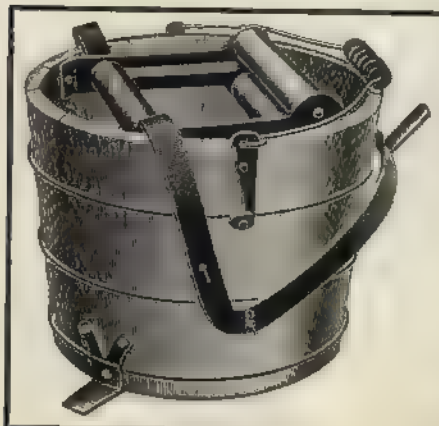
Equipped with same wringer and all the working parts found on tthe high-priced Elmo electric, it cannot be equaled by any other power washer made.

Just consider the advantages you have over the stock other dealers are trying to dispose of. The wringer has a 5-year guarantee. Positively driven by a chain drive, it wrings clothes thoroughly and much dryer than any others, as they use belts and you know how they stretch and slip

They meet every requirement and out-last three ordinary machines—sell at a price that is reasonable and enable the dealer to clean up good profits.

Gem Power Washers work wonders on wash days, satisfied customers help sales and dealers' dollars multiply rapidly with this great machine. Get the details and dealers' terms. We have a special offer for you.

Grinnell Washing Machine Co.
Grinnell, Iowa



The Eagle Mop Wringer

and Bucket Combined is the ACKNOWLEDGED BEST, by consent of all Mop Wringer Users

Ask any Janitor or Porter—the men who know and who have tried them all—they will tell you the EAGLE has no equal. THREE MILLION have been made and sold—and they are still selling

SEND FOR CATALOGUE DESCRIBING FULL LINE

The Eagle Woodenware Mfg. Co.
Sole Manufacturers HAMILTON, OHIO

Chatillon

Ice Scales and Tools

We manufacture a complete line of ice scales and ice tools for both commercial and household use

You will find the design and finish of these tools as perfect as it is practicable to make them—and the silent guarantee of the Chatillon name will be taken as full evidence that the tools or scales in question are every bit as good as they look

Let us submit full particulars—it's ice tool time

John Chatillon & Sons

85-93 Cliff St., New York

MR. MERCHANT

WE SELL GOODS WITH TALKING POINTS

AND TALKING POINTS SELL GOODS

"GEM" Sad Iron

NO DIRT NO SMOKE NO OVERHEAT NO DANGER

The "Gem" Sad Iron has talking points. The [illegible] wife need no [illegible] hot stove to do her ironing when she can have the most perfect self-regulating iron at a moderate price that will operate for one half cent per hour—only half as much as with other means.

[illegible] have the "Gem" on your counter to show to your customers. They will appreciate your showing the "Gem."

The "Brite Lite" Portable Lamp has talking points. It is a beauty, throws out 400 C. P. of brilliant mellow light—can be carried anywhere, outdoors or indoors—cost of light is only one-fourth of electricity or city gas—gives light by which colors can easily be distinguished

The "Brite Lite" Portable gives exceptional service at minimum cost

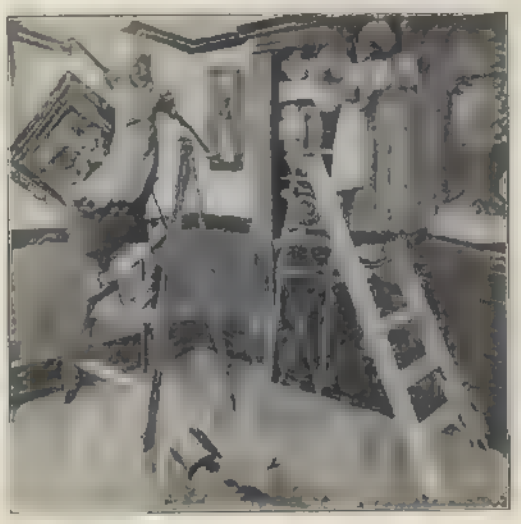
We offer very attractive prices on exceptionally meritorious and handsome articles.

We sell exclusively to merchants and protect their interests. Write for complete descriptive catalogue of the "BRITE LITE" Lighting Devices.

Branch at Denver, Colo.

ALBERT LEA GAS LIGHT CO.

Albert Lea, Minn., U. S. A.



A Glance Convinces

Your customers don't have to follow the example of the [illegible] to see the advantages of the "Wilder" Ladder.

Stiles, steps, top and back supports are made of heavy galvanized sheet steel; braces of wrought iron, malleable castings connect the top.

A little selling talk, a demonstration of its lightness, strength and handiness will convince any customer. It's a winner because it's a quality ladder at the right price with the right profit.

Write for details today.

Jones Hardware Co.

Richmond, Ind.

The "Wilder" Line

One Quality Throughout

Throughout the entire "Wilder" line you will find the highest quality only of tube and scale. That is why **the entire line is guaranteed accurate to within a fraction of a degree.**

You're sure of Thermometer sales and profits if the "Wilder" name is on your stock.

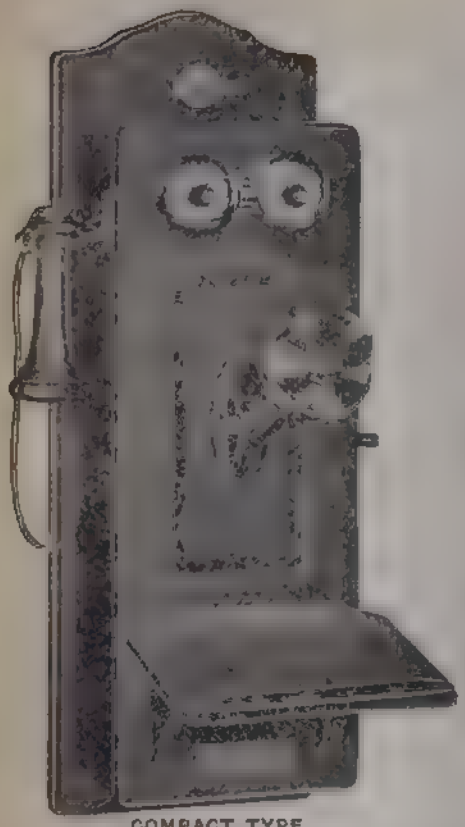
Write to-day for our catalog.

Charles Wilder Co.

W. & L. E. Gurley, Owners

TROY, N. Y.

WALL TELEPHONES



COMPACT TYPE

Guaranteed Without Time Limit

We carry the most durable and efficient telephone on the market, made by the largest manufacturers of Bridging Telephones in the world

Every telephone is guaranteed against defects in material and workmanship, not for a stated period of time, but for a life time.

By use of the telephone the farmer is constantly in touch with the market, is enabled to communicate with neighbors and friends and finds it indispensable, especially in cases of sickness or accident; the manufacturer can be in constant touch with various branches, logging headquarters can daily converse with camps or crews; every line of industry in fact has found that the telephone saves time, steps and money.

All of our instruments are perfect bridging models designed by engineers who have specialized along this line for years. Their methods of construction tend to prolong the life of the various parts and of the instrument as a whole.

Standard equipment of each instrument consists of **Three-ply Laminated Generator; Long Pattern Bridging Bell Ringer, enameled and Nickel Plated; Long Lever Automatic Switch; Platinum Contacts; Genuine Solid Back Long Distance Transmitter with Adjustable Arm and Concealed Cords; Long Distance Induction Coil; Bi-polar Receiver and Cord; Two cells of Dry or Wet Batteries (according to style of cabinet); Bi-Polar Lightning Arrester which GUARANTEES TELEPHONE AGAINST LIGHTNING, and Cabinet of quarter sawed Oak with high piano finish.**

With each telephone we furnish detailed instructions for installing apparatus and constructing rural lines. We will supply advice, suggestions, plans or specifications gladly and without charge.

DOUBLE BATTERY BOX TYPE

Two different methods of line construction are used. In rural communities where there is no interference from electric light or trolley wires the Grounded Circuit is used. One wire only is strung on poles to which one side of the telephone is connected and the circuit is completed by connecting the other side or binding post of the telephone to a wire soldered to a galvanized iron rod six feet into the earth. The Metallic Circuit of two wires is constructed by running a second wire parallel with the first and connecting same with the side of the telephone not already attached to the line wire. **For private lines No. 14 galvanized wire is used. Bridging lines require No. 12, and on longer than 25 miles in length use No. 10 galvanized wire.**

Be sure these line wires to touch one another, nor anything else except insulators. Use Porcelain Knobs or Insulated Cleats inside, and Pony Glass Insulators outside. Home grown poles can be used but should be at least 15 ft. high and 4 in. at top, thirty or forty poles to the mile with regular Brackets for Insulators. If several grounded or Metallic circuits are carried on one set of poles use Cross Arms and Pins instead of Brackets. We can furnish you anything you need from Post Hole Diggers and Climbing Irons to Battery Renewals.

BRIDGING OR PARTY LINES, TOLL, RURAL, ETC.

It is possible to use 40 of our 'phones on a line, but not satisfactory. 15 should be the limit on a section and if more are wanted, cut-in the and have a plug board in one house to connect the divisions when necessary. All Ringer Movements on a line should be wound to the same resistance; we furnish 1,600 Ohms as regular, but any other can be supplied.

COMPACT TYPE

	Each
No. 480A—4 Bar, 12 Magnet Bridging Generator; Bridging Ringer, Wound to 1600 Ohms	$14.00
No. 480B—5 Bar, 15 Magnet Bridging Generator; Bridging Ringer, Wound to 1600 Ohms	18.75
No. 480C—6 Bar, 18 Magnet Bridging Generator; Bridging Ringer, Wound to 1600 Ohms	21.00

The 6 Bar is Only Preferable to the 5 Bar at Junction Points of Many 'Phones; or where the very Best and Strongest Instrument is Desired.

Size Case 32x12 in. Over-all; Net Weight 35 Lbs.

Shipping Weight, One in Crate, 52 Lbs.; Two, 100 Lbs.

DOUBLE BATTERY BOX TYPE

	Each
No. 480D—4 Bar, 12 Magnet Bridging Generator; Bridging Ringer, Wound to 1600 Ohms	$16.00
No. 480E—5 Bar, 15 Magnet Bridging Generator; Bridging Ringer, Wound to 1600 Ohms	19 50
No. 480G—6 Bar, 18 Magnet Bridging Generator; Bridging Ringer, Wound to 1600 Ohms	21.75

The 6 Bar is Only Preferable to the 5 Bar at Junction Points of Many 'Phones; or where the very Best and Strongest Instrument is Desired.

Size Case 26x9 in. Over-all; Net Weight 30 Lbs.

Shipping Weight, One in Crate, 53 Lbs.; Two, 91 Lbs.

SERIES OR PRIVATE LINES

Series 'Phones are used on separate lines to Exchange Switchboard, or on private line of two instruments. No Series Telephone is satisfactory for party line service.

COMPACT TYPE

	Each
No. 480H—4 Bar, 50,000 Ohm, Series Generator; Series Ringer, Wound to 80 Ohms	$15.00

DOUBLE BATTERY BOX TYPE

	Each
No. 480K—4 Bar, 50,000 Ohm, Series Generator; Series Ringer, Wound to 80 Ohms	$15.00

The Smooth-Running, Quiet, Cleanly Electric!

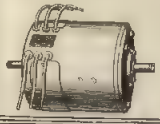
It is a delight to drive an electric to feel yourself borne on with perfect ease, conscious only of smooth, quiet, even motion!

Then, too, there is the sense of mastery without effort, in the car's instant re-ponse to the movement of a single lever.

The car that affords the greatest pleasure has

Westinghouse Electric Vehicle Equipment

Westinghouse vehicle motors and controllers give such excellent service that the operator never thinks of them. They offer nothing to distract his mind from the pleasure of his trip or the enjoyment of his friends' company.



It has taken long practical experience and great engineering skill to build apparatus so thoroughly efficient. Such experience and skill in fact, as is alone possessed by the Westinghouse Company, the builder of the first successful vehicle motors and always the leader in their manufacture.

See that your electric has Westinghouse equipment.

Westinghouse Electric & Manufacturing Co.

Sales offices in 45 American cities — East Pittsburgh, Pa.

E.S. 1827 & CO.

We Manufacture Everything From the Primer to the Finishing Coat

E.S. 1827 & CO.

BODY
RUBBING
CHASSIS

Varnishes

EXCEPTIONALLY PALE WHEN REQUIRED

OPAQUE COLOR RUBBING VARNISHES*
LIQUID GLOSS AUTOMOBILE COLORS*
AUTOMOBILE COLORS (in Japan)*
ROUGH STUFF AND METAL PRIMERS

*To match your shades

EDWARD SMITH & COMPANY

VARNISH MAKERS FOR 88 YEARS

West Avenue, 6th and 7th Streets, Long Island City. P. O. Box 1780 New York City
Western Branch, 3532-34 S. Morgan Street, Chicago

Three Reasons Why

TRIMO TOOLS

Are the Best For A Mechanic

1. They are made so strong that but few repairs are required.
2. The inserted jaw in the Trimo Pipe Wrench, when the teeth are worn, can be readily replaced, thus adding 50 % to the life of the tool.
3. Every part of every Trimo Tool is interchangeable, and can be replaced at small cost.

TRIMO PIPE WRENCH

TRIMO PIPE CUTTER

Send for Catalog No. 133

MADE BY

Trimont Manufacturing Co.

55-71 AMORY STREET ROXBURY, MASS.

Williams' Superior Drop-forged Tools

Most Wrenches are not made from a steel chemically and phyaically right for the work they must perform.

Most Wrenches are not hardened to a depth that will make them wear and still not lose their pulling-toughness.

Most Wrenches lack the head-angle which makes them most useful in the close mechanical quarters you will frequently find.

Most Wrenches do not reach the degree of "fit" which is necessary to leave the edges of nuts and screw-heads in good shape, *but we can prove to you that*

Williams' Standard Drop-forged Wrenches Do Not Lack These Qualities.

The service and satisfaction, which the user will get from them, may be assured by you to your customer.

Springfield, Mass., Jan. 25, 1912.

Gentlemen:

Please ship us three finished sets of your "Bix Six" No 4 wrenches, and also one finished set No. 5 wrenches. We find that your wrenches give the best service and shall strongly recommend them to the trade during the coming season.

Yours truly,

J. H. WILLIAMS & CO., Superior Drop-forgings

57 Richards St., BROOKLYN, N. Y.

"A product without a peer"

APOLLO BEST BLOOM
Galvanized Sheets

AMERICAN SHEET & TIN PLATE CO. APOLLO BEST BLOOM PITTSBURGH

Manufactured Originally in 1884

During that year 1500 tons were produced.
Now upwards of 300,000 tons are demanded
annually by consumers who value quality.
Only high class jobbers and merchants handle Apollo

American Sheet and Tin Plate Company
General Offices: Frick Building, Pittsburgh, Pa.

DISTRICT SALES OFFICES
Chicago Cincinnati Denver New Orleans New York Philadelphia Pittsburgh St. Louis
EXPORT REPRESENTATIVES: UNITED STATES STEEL PRODUCTS COMPANY, New York City
Pacific Coast Representatives: UNITED STATES STEEL PRODUCTS COMPANY, Los Angeles, Portland, San Francisco, Seattle

Corbin Screw Products

THE CORBIN SCREW CORP. CORBIN NEW BRITAIN, CONN. U.S.A.

Wood, Machine, Set and Cap Screws
Jack, Safety and Ladder Chain
Special Milled Parts made from the Solid Bar
Stove, Tire, Sink and Agricultural Bolts
Duplex Coaster and Motorcycle Brakes

The Corbin Screw Corporation Division
The American Hardware Corporation

Factory and General Offices: New Britain, Conn.

DISTRIBUTORS—The Corbin Screw Corporation of Chicago, 65-67 West Lake St., Chicago, Ill.
P. & F. Corbin Co. of New York, 108 Lafayette Street, New York, N. Y.
Russell & Erwin Mfg. Co. of New York, 98 Lafayette St., New York, N. Y.
P. & F. Corbin, Eighth and Arch Streets, Philadelphia, Pa.

SIDE SASH BALANCES

Size No.	Per Set of Four	For Sash Weighing, Lbs.	Length of Tape, In.	Sets in a Case	Weight Per Set	Dimensions of Face Plate, Inches		Dimensions of Mortise Inches		
						Length	Width	Length	Width	Depth
6	$2.00	4 to 6	30	24	3¾ Lbs.	3⅝	1⅛	2⅝	1⅛	2½
8	2 20	6 to 8	30	24	3 Lbs.	3⅝	1⅛	2⅝	1⅛	2½
10	2.40	8 to 10	34	24	3¼ Lbs.	3⅝	1⅛	2⅝	1⅛	2½
12	2 60	10 to 12	38	24	4½ Lbs.	4½	1⅛	2¾	1⅛	2⅞
14	2.80	12 to 14	42	24	4¾ Lbs.	4½	1⅛	2¾	1⅛	2⅞
16	3.00	14 to 16	42	18	6½ Lbs	5	1⅜	3⅛	1⅜	3⅛
18	3.20	16 to 18	44	18	6¾ Lbs.	5	1⅜	3⅛	1⅜	3⅛
20	3.40	18 to 20	46	18	6¾ Lbs	5	1⅜	3⅛	1⅜	3⅛
23	4.00	20 to 23	50	16	8½ Lbs	5⅜	1⅝	3⅜	1⅝	3⅜
26	4.25	23 to 26	50	16	8¾ Lbs	5⅜	1⅝	3⅜	1⅝	3⅜
29	4 50	26 to 29	52	16	9½ Lbs	5⅜	1⅝	3⅜	1⅝	3⅜
32	4.75	29 to 32	52	16	9½ Lbs	5⅜	1⅝	3⅜	1⅝	3⅜
35	5.50	32 to 35	64	12	14½ Lbs	6¼	1½	4⅛	1½	4⅝
38	5.75	35 to 38	64	12	14½ Lbs.	6¼	1½	4⅛	1½	4⅝
41	6.00	38 to 41	64	12	15 Lbs	6¼	1½	4⅛	1½	4⅝

One Set in a Box, with Screws

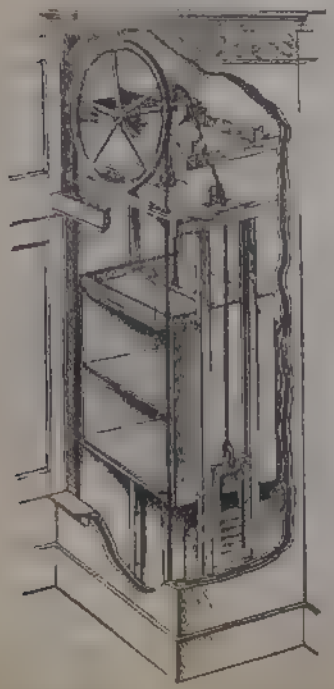
A Set of Four Balances is Required for One Window of Two Sash Larger sizes of Side Balances and all sizes of Top Balances can be furnished to special order In ordering special sizes give exact weight and height of each sash also note size of Face Plate and Depth of Mortise and make room for same in Casings. **Odd Sized Balances, Ordered Special, cannot be returned.**

Tension of spring is varied 2 to 3 Lbs by set screws in face plate Can be applied to windows in old houses having no pockets or box frames. This saves the light space in factories usually taken up by Frame Boxes.

The Aluminum Bronze Ribbon is thoroughly tested, resists moisture, is not affected by oils and has great tensile strength The Case of the Balance is of Gray Iron

SIMPLEX DUMB WAITER FIXTURES ONLY

A Modern Necessity in Private Residence and Apartment Houses, Hotels, Saloon and Cafe Combinations, Warehouses, Factories, Stores, Office Buildings, etc. Saves much time and labor



Showing Fixtures in place when Dumb Waiter is completed

Prices do Not Include Car Guides, Counter Balance Weights nor Rope

A Set of fixtures includes hand wheel, hoist wheel, shaft, two babbitted bearings, collar, spring check and leader, two pulleys and three rope leaders, with directions for erecting.

The car is held at any height, by means of a spring clamp Brake, acting on the hand rope and controlled from any floor by the check cord

Length Shaft, In.	14	16	18	20
Diam. Wheel, In.	16	20	24	30
Size Well, In.	22x19	27x23	31x27	37x33
Size Car, In.	20x16	24x20	28x24	34x30
Capacity, Lbs.	50	100	150	300
Rope Required, Ft.	62	64	65	70
Size Rope to Use.	⅜	⅜ or ½	½	½
Wt. Set, Lbs.	50	55	65	85
*Per Set	$20 00	24.00	26.00	30.00

One Set Fixtures in a Crate

Use ⅜, ⅞ or ½ In. Check Rope, the lengths given in the table are required for the first 20 ft. of Height; above that, figure 1 ft. for Hoist Rope and 2 ft. for Hand Rope for each foot of Height. The sizes given for Hoist Ropes are for Manila, but ⅜ in. Cotton Rope is often substituted for all sizes.

DUMB WAITER OR VERTICAL SLIDING DOOR PULLEYS

For Wall Show Cases, Etc.

Per Dozen

No. 178F—3x⅝ In. Sheave, 1⅛x6 In. Heavy Face; Takes ½ In. Rope and No. 15 Screws $3.30

Two-thirds Dozen in a Package

Weight 13½ Lbs. per Dozen

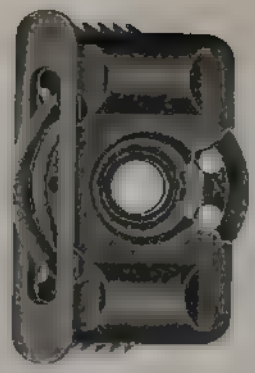
Per Dozen

No. 178H—Ball Bearing, 3x1½ In. Sheave, 3x4 In. Heavy Base; for Doors up to 150 Lbs.....$12.00

Half Dozen in a Box

Weight 25 Lbs. per Dozen

SASH PULLEYS



Cone Bearing

To fasten, bore four ⅛ in holes in line centers ⅝ in apart or use Quadruple Boring Bit.

Per Dozen

No. 110—2 in. Wheel. Mortise ⅜x2⅛ in. Black Finish. **$0.40**

Weight 2 Lbs. per Dozen

100 to 110 Dozen in a Barrel

Cone Bearing

Per Dozen

No. 105—2 in. Wheel. Mortise 2½x⅜ in. Black Finish **$0.40**

Weight 2 Lbs. per Dozen

125 Dozen in a Barrel

Cone Bearing

Per Dozen

No. 106—2 in. Wheel, Size of Face 4 ½x1¼ in. Mortise 2½x⅝ in.; Black Finish.....**$0.40**

Weight 2 Lbs. per Dozen

50 Dozen in a Case

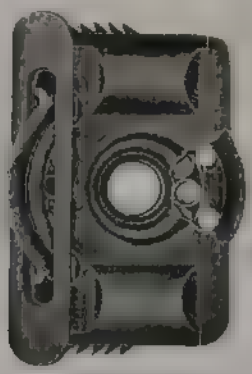
Cone Bearing

Per Dozen

No. 208—2¼ in. Wheel. Size of Face 4¼x1⅛ in. Mortise 2¼x⅝ in.; Black Finish **$0.60**

Weight 2¼ Lbs. per Dozen.

35 Dozen in a Case



Ball Bearing

To fasten, bore four ⅛ in. holes in line, centers ⅝ in. apart, or use Quadruple Boring Bit.

Per Dozen

No. 10—2 in. Wheel. Mortise ⅛x2⅛ in., Black Finish **$0.60**

Weight 2 Lbs. per Dozen

100 to 110 Dozen in a Barrel

Ball Bearing

Per Dozen

No. 5—2 in. Wheel; Mortise 2⅛x⅝ in., Black Finish **$0.60**

Weight 2 Lbs. per Dozen

50 Dozen in a Case

Ball Bearing

Per Dozen

No. 6—2 in. Wheel; Size of Face 4½x1⅛ in.; Mortise 3½x⅝ in.; Black Finish **$0.60**

Weight 2⅜ Lbs. per Dozen

50 Dozen in a Case

COMMON SENSE

Wrought Steel; Electrically Welded throughout; Round Ends; Use 1 in. Bit to Mortise.

Per Dozen

No. 1CS—2 in. Polished Wheel; 4x1 in Face **$0.40**

Weight 2¼ Lbs. per Dozen

100 Dozen in a Barrel

Wrought Metal; Plain Axle; 2¼ in. Steel Wheel; Size of Face 5½x1⅛ in.

Per Dozen

No. 112¼—Lacquered Face . . . $1 64

No. 412¼—Brass Face 2 70

No. 9112¼—Roller Bearing. Otherwise same as No. 112¼..... . . 2 64

Half Dozen in a Box

Cast Iron; Turned Axle; Amber Bronze Finish; Polished Face and Wheel.

Nos.	500	510
Diam. Wheel, In.	2	2¼
Face, In.	5x1⅛	5x1⅛
Weight Dozen, Lbs.	6¾	8
Per Dozen	$0 80	.96

Wm. A. Rogers.

Celebrated SILVER PLATED FLATWARE. Wm. A. Rogers is one of the oldest established makers. The quality of their product is beyond question.

PRICES PER DOZEN

The goods illustrated on this page are the genuine Wm. A. Rogers brand; extra heavily plated on 21 per cent nickel silver, hand burnished and quality guaranteed. The genuine Wm. A. Rogers goods are put up in boxes like cut and are accompanied by a written guarantee from the manufacturer.

ANNOUNCEMENT

The Wm. A Rogers, have discontinued the manufacture of X, XX, XXX plate in **Horse-Shoe Brand,** and hereafter will make the following:

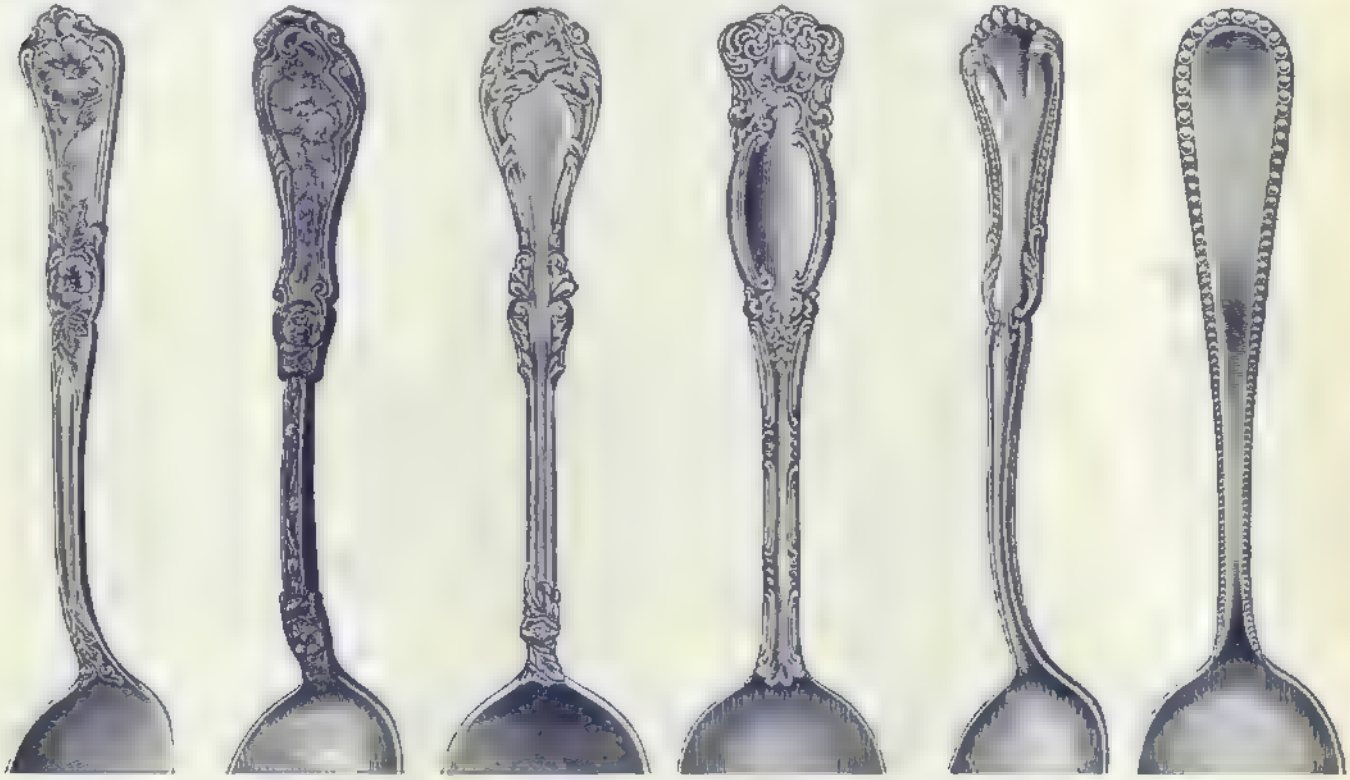
WM. A. ROGERS SXR (Sectional Re-inforced)

Tea Spoons bearing this mark are guaranteed to stnp not less than **three ounces** of pure silver per gross. Parts most exposed to wear will be **re-inforced** by their special process with full triple plate. All other staple pieces in proportion.

WM. A. ROGERS SXXXR (Sectional Re-inforced)

Tea Spoons bearing this mark are guaranteed to be plated with **FULL SIX OUNCES** of pure silver per gross. Parts most exposed to wear are **re-inforced** with an **additional heavy plate** by their special process, making them equal in service to quadruple plate. Other staple pieces in proportion.

They always use in their Horse-Shoe brand 21 per cent German silver base, which is **whiter, harder** and **more durable** than the grades used by other manufacturers. This well-known fact, coupled with their special plate described above, warrants the dealer in guaranteeing the Hore-Shoe brand superior to any and all other makes.



GRENOBLE PATTERN
French Gray

Tea Spoons
No. Per doz
1545 SIR plate $5 10
1546 SIXR " 6 95
Dessert Spoons
1547 SIR plate $ 9 10
1548 SIXR " 11 75
Table Spoons
1549 SIR plate $10 15
1550 SIXR " 13 90
Dessert Forks
1551 SIR plate $ 9 10
1552 SIXR " 11 75
Medium Forks
1553 SIR plate $10 15
1554 SIXR " 13 90
Butter Knives
1555 SIR plate $11 20
Sugar Shells
1556 SIR plate $9 60

GLENROSE PATTERN
French Gray

Tea Spoons
No. Per doz
1557 SIR plate $5 10
1558 SIXR " 6 95
Dessert Spoons
1559 SIR plate $ 9 10
1560 SIXR " 11 75
Table Spoons
1561 SIR plate $10 15
1562 SIXR " 13 90
Dessert Forks
1563 SIR plate $ 9 10
1564 SIXR " 11 75
Medium Forks
1565 SIR plate $10 15
1566 SIXR " 13 90
Butter Knives
1567 SIR plate $11 20
Sugar Shells
1568 SIR plate $9 60

HANOVER PATTERN

Tea Spoons
No. Per Doz
1569 SIR plate $5 10
1570 SIXR " 6 95
Dessert Spoons
1571 SIR plate $ 9 10
1572 SIXR " 11 75
Table Spoons
1573 SIR plate $10 15
1574 SIXR " 13 90
Dessert Forks
1575 SIR plate $ 9 10
1576 SIXR " 11 75
Medium Forks
1577 SIR plate $10 15
1578 SIXR " 13 90
Butter Knives
1579 SIR plate $11 20
Sugar Shells
1580 SIR plate $9 60

WARWICK PATTERN

Tea Spoons
No. Per doz
1581 SIR plate $5 10
1582 SIXR " 6 95
Dessert Spoons
1583 SIR plate $ 9 10
1584 SIXR " 11 75
Table Spoons
1585 SIR plate $10 15
1586 SIXR " 13 90
Dessert Forks
1587 SIR plate $ 9 10
1588 SIXR " 11 75
Medium Forks
1589 SIR plate $10 15
1590 SIXR " 13 90
Butter Knives
1591 SIR plate $11 20
Sugar Shells
1592 SIR plate $9 60

MARCELLA PATTERN

Tea Spoons
No. Per doz
1593 SIR plate $5 10
1594 SIXR " 6 95
Dessert Spoons
1595 SIR plate $ 9 10
1596 SIXR " 11 75
Table Spoons
1597 SIR plate $10 15
1598 SIXR " 13 90
Dessert Forks
1599 SIR plate $ 9 10
1600 SIXR " 11 70
Medium Forks
1601 SIR plate $10 15
1602 SIXR " 13 90
Butter Knives
1603 SIR plate $11 20
Sugar Shells
1604 SIR plate $9 60

SUDORA PATTERN

Tea Spoons
No. Per doz
1605 SIR plate $5 10
1606 SIXR " 6 95
Dessert Spoons
1607 SIR plate $ 9 10
1608 SIXR " 11 75
Table Spoons
1609 SIR plate $10 15
1610 SIXR " 13 90
Dessert Forks
1611 SIR plate $ 9 10
1612 SIXR " 11 75
Medium Forks
1613 SIR plate $10 15
1614 SIXR " 13 90
Butter Knives
1615 SIR plate $11 20
Sugar Shells
1616 SIR plate $9 60

Wm. A. Rogers.

CELEBRATED SILVER PLATED FLATWARE

1881 ROGERS

Made only in A1 Extra Plate quality excepting Shell Pattern.

Wm. A. Rogers is one of the oldest established makers. The quality of their product is beyond question. The goods illustrated on this page are the genuine

1881 ROGERS A1 BRAND

extra heavily plated on 18 per cent nickel silver, hand rubbed shell and quality guaranteed. The genuine Wm. A. Rogers goods are put up in boxes and are accompanied by a written guarantee from the manufacturer

PRICES PER DOZEN

CARLTON PATTERN

Made in A1 only

Tea Spoons

No.	Per Doz
1617 A1 Plate	$3.30

Dessert Spoons

1618 A1 Plate $5.35

Table Spoons

1619 A1 Plate...$8.00

Medium Forks

1620 A1 Plate $8.00

Dessert Forks

1621 A1 Plate $5.35

Butter Knives

1622 A1 Plate $8.00

Sugar Shells

1623 A1 Plate $5.35
1624 A1 Gilt " 9.35

ARDSLEY PATTERN

Made in A1 only

Tea Spoons

No.	Per Doz
1625 A1 Plate	$3.00

Dessert Spoons

1626 A1 Plate ..$5.35

Table Spoons

1627 A1 Plate...$8.00

Medium Forks

1628 A1 Plate.. $8.00

Dessert Forks

1629 A1 Plate $5.35

Butter Knives

1630 A1 Plate $8.00

Sugar Shells

1631 A1 Plate $5.35
1632 A1 Gilt " . 9.35

LA VIGNE PATTERN

French Gray
Made in A1 only.

Tea Spoons

No.	Per Doz
1633 A1 Plate	$3.00

Dessert Spoons

1634 A1 Plate $5.35

Table Spoons

1635 A1 Plate ..$8.00

Medium Forks

1636 A1 Plate ..$8.00

Dessert Forks

1637 A1 Plate.. $5.35

Butter Knives

1638 A1 Plate . $8.00

Sugar Shells

1639 A1 Plate $5.35

LINDEN PATTERN

Made in A1 only

Tea Spoons

No.	Per Doz
1640 A1 Plate	$3.00

Dessert Spoons

1641 A1 Plate $5.35

Table Spoons

1642 A1 Plate...$8.00

Medium Forks

1643 A1 Plate $8.00

Dessert Forks

1644 A1 Plate $5.35

Butter Knives

1645 A1 Plate $8.00

Sugar Shells

1646 A1 Plate $5.35
1647 A1 Gilt " 9.35

SHELL PATTERN

A1 and Triple only.

Tea Spoons

No.	Per Doz
1648 A1 Plate	$3.80
1649 Triple "	5.35

Dessert Spoons

1651 A1 Plate $5.35
1655 Triple " 8.80

Table Spoons

1652 A1 Plate.$ 8.00
1653 Triple " . 10.70

Dessert Forks

1654 A1 Plate $5.35
1656 Triple " 8.80

Medium Forks

1656 A1 Plate.$ 8.00
1657 Triple " 10.70

Twist Butters

1658 A1 Plate . $8.00

Sugar Shells

1659 A1 Plate $5.35

Windsor Pattern furnished at same price.

TIPPED PATTERN

Tea Spoons

No.	Per Doz
1660 A1 Plate	$3.00

Dessert Spoons

1661 A1 Plate $ 5.35

Table Spoons

1662 A1 Plate.. $8.00

Dessert Forks

1663 A1 Plate $5.35

Medium Forks

1664 A1 Plate .$8.00

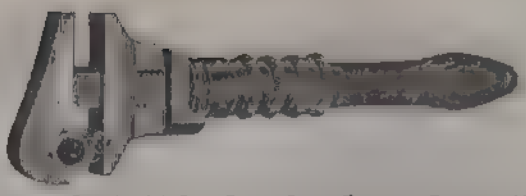
Butter Knives

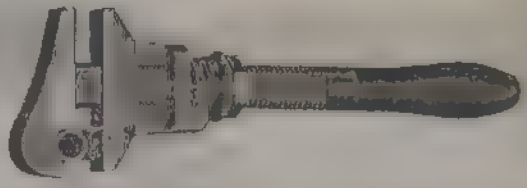
1665 A1 Plate .$8.00

Sugar Shells

1666 A1 Plate . $5.35

COMBINATION WRENCHES





Head, Bar and Shank, All One Piece Steel Forging, Polished Wood Handle, Combines the Best Qualities of a Pipe Wrench with a regular Nut Wrench

LONG NUT

Affords Better Grip for Hand and can be Adjusted in Cold Weather without removing glove or mitten

No. 715—ERIE—Polished

Length, In.	10	12	15	18
Holds Pipe, In	½ to 1	½ to 1¼	½ to 2¼	½ to 3
Weight Dozen, Lbs	26	40	56	87
Per Dozen	$25.20	28.50	40.50	72.00

Half Dozen in a Box

No. 610—BEMIS & CALL—Gun Metal Finish

Length, In.	10	12	15	18
Holds Pipe, In	½ to 1	½ to 1¾	½ to 2¼	½ to 3
Weight Dozen, Lbs.	26	40	56	87
Per Dozen	$25.25	28.50	40.50	72.00

18 in. One-Sixth Dozen, Balance Half Dozen in a Box

SHORT NUT

May be Tightened with Hand or Wrench

No. 615—BEMIS & CALL—Gun Metal Finish

Length, In.	10	12	15	18
Holds Pipe, In	½ to 1	½ to 1¾	½ to 2¼	½ to 3
Weight Dozen, Lbs.	24	36	52	85
Per Dozen	$23 00	26.00	37.00	66.00

18 in. One-Sixth Dozen, Balance Half Dozen in a Box

EXTRA PIPE JAWS OR DOGS, for Bemis & Cal Wrenches

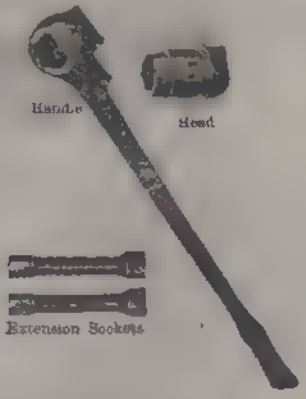
For Wrench, In.	10	12	15	18
Weight Each, Oz.	1	2	3	4
*Each	$0.20	.24	.30	.40

Open Stock

REVERSIBLE RATCHET WRENCHES

FAVORITE

Used by Railroads, Bridge, Ship and Engine Builders, etc.; Made of Best Quality Steel, Japanned Finished.



The Advantage of this Style of Wrench is its Continuous Grip and Motion until Nut or Cap Screw is seated, no matter how cramped the position

EXTRA HANDLES AND HEADS ONLY

Set Nos.	Length Handle, In.	U. S. Nuts Square, in	U. S. Nuts Hex., In.	Wt. Set, Lbs.	Per Set
1	15	½	½	3¼	$4 50
2	28	¾	¾	6¾	5.50
2½	28	⅞	¾	8	6.50
3	28	1	1	9	7.50

Per Set

Set No. 0—Complete with 15 in. Handle, Head for ½ or ⅝ in. Square Nuts, One 8 in. Extension Socket, 10 Sockets to fit Standard Nuts (1 Each), Square and Hexagon, ⅜, ½, ⅝, ¾ and ⅞ in. $20 00

Each Set Mounted on an Oak Board; Wt. 12 Lbs. per set

EXTRA PARTS

Per Set

No. 01—Handle and Head only from above Set, weight 3 Lbs $4 00

No. 02—Extension Sockets and 10 Sockets from Above Set; Weight 7 Lbs. 3 00

No. 04—Handle from Above and 7 in. Drill Head. Weight 4½ Lbs. 7.50

Each

No. 05—7 in. Drill Head only for Square Shank Drills; Weight 2¼ Lbs. $6.00

EXTRA SIZE HEADS ONLY

For Wrenches Nos.	Extra Sizes Square, In.	Extra Sizes Hexagon, In	Each
1	⅝	⅝, ¾	$2 50
2	⅞	⅞, 1, 1⅛	3.00
2½	1	1⅛, 1¼	3 00
3	1⅛, 1¼	1⅛, 1¼	4 00

EXTRA EXTENSION SOCKETS

Per Set

Set Consists of Two 8 in. Extra Heavy Extension Sockets, fitting Hexagon Opening of No. 2 Wrench for ¾ in. Square or Hexagon Nuts, Weight 3 Lbs. per set $1 00

Open Stock

WRENCHES

PERFECT SOLID HANDLE

Head, Bar and Shoulder forged of one piece of Solid Steel, Case Hardened, Oil Finished, Hardwood Riveted Handle.

Length, In.	6	8	10	12	15	18	21
Opens, In.	⅞	1¼	1⅝	2⅛	2¾	3⅛	4¼
Weight Dozen, Lbs.	9	15	28	38	52	76	116
Per Dozen.	$9.00	10.00	12.00	14.00	24.00	30.00	36.00

6 to 12 in., Half Doz., 15 to 18 in., One Third Doz., 21 in., One Twelfth Dozen in a Package

COES' STEEL HANDLE

Designed for Heaviest Work, by Engineers, Railway Shops, etc. and where Heat and Dampness will injure wood. Forged Steel Bar and Screw; Solid Steel Jaw and Strap Bolster, Semi-Steel Cast Handle, Strongly Cross Riveted to Bar.

12 in. and larger have Ball Bearing Screws

Length, In.	6	8	10	12	15	18	21
Opens, In.	⅞	1¼	1⅝	2¼	2⅝	3⅛	4⅛
Weight Dozen, Lbs.	9	17	26	43	62	80	121
Per Dozen	$9.00	10.00	12.00	14.00	24.00	30.00	36.00

6 to 12 in., Half Dozen; 15 to 21 in., One-Third Dozen in a Package

TRIMO MONKEY

Drop Forged Steel, Case Hardened, Natural Finish Polished Jaws. Movable Jaw is slotted through to head, is as rigid as a solid drop forged one. Its use prevents rounding by slipping on corners of nuts; Leverage increases as Jaw extends for larger nuts.

Length, In.	6	8	10	12	15	18
Opens, In.	⅞	1⅛	1¾	2⅛	2⅜	3⅛
Weight Dozen, Lbs.	8½	15	25	34	54	80
Per Dozen	$9.00	10.00	12.00	14.00	24.00	30.00

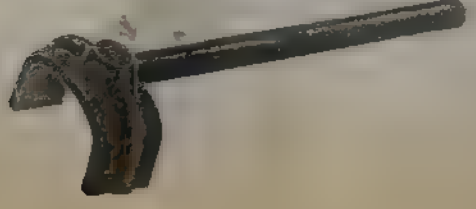
½ Dozen in Box

ACME

Solid Steel, Japanned, Polished Head; Only Four Parts, for Farmers' Use and General Purposes; Indestructible.

Length, In.	6	8	10	12	15
Opens, In.	1	1¾	2	3⅛	4¼
Weight Doz., Lbs.	9¼	15½	24	37	54
Per Dozen.	$10.00	12.00	14.00	17.00	24.00

Half Dozen in Wood Box



COES' KNIFE HANDLE

Designed for All General Purposes, for Farmers, Mechanics, Agricultural Dealers and Workshops or All Kinds in which a Wrench is used. Has Hardened Steel Jaws and Bar which runs Entire Length of Wrench, Increasing Strength, Two Piece Handle, Riveted to Bar, Steel Hardened Screw, Rivet and Key, Oil Finish.

Length, In.	6	8	10	12	15	18	21
Opens, In.	⅞	1¼	1⅝	2⅛	2½	3⅛	4
Weight Dozen, Lbs.	9	16½	25	38	54	81	109
Per Dozen.	$9.00	10.00	12.00	14.00	24 00	30 00	36.00

6 to 12 in., Half Dozen; 15 to 21 in., One-Third Dozen in a Box

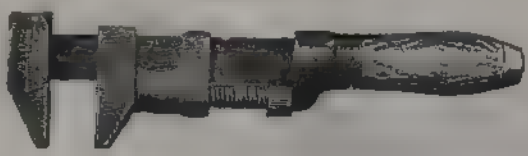
COES' KEY MODEL

Unbreakable, Solid, Rigid; Unaffected by Moisture. Will not Batter nor Jam Large Nuts. Is Self-contained, Key cannot Come off and the two Positions for Jaw Straps allow it to work perfectly in corners; used by Railroads, Engineers and Machinists for heaviest work on large unions and finished work.

Forged Steel Bar and Screw, Hardened Jaws and Strap Bolster; Natural Finish.

Length, In.	28	36	48
Opens, In.	5¼	6¼	9½
Weight Each, Lbs.	15	25	62
Each.	$9.75	19.00	47.00

Open Stock



AGRICULTURAL

Wrought Iron Bar Head and Screw. Oil Finish, Hardwood Handle. Especially designed for Farmers, for use on Agricultural Implements, Plows, Machinery, etc.

Length, In.	6	8	10	12	15
Opens, In.	⅜	1¼	1¾	2⅛	2⅝
Weight, Dozen, Lbs.	8¼	14½	23	26	40
Per Dozen.	$10.00	12.00	14.00	17.00	24.00

Half Dozen in a Package

No. 81 -GENUINE WESTCOTT NUT

Adjustable S Pattern Japanned Iron Stock, Drop Forged Steel, Jaws Polished, Perfectly Tempered. May be used in many places inaccessible to ordinary Wrench, as in corners, against walls, etc.

Length, In.	6	8	10	12	14
Opens, In.	¾	1	1⅜	1⅝	2
Weight Dozen Lbs.	5	14	21	32	56
Per Dozen.	$7.20	9.00	12.00	15.00	21.00

Open Stock; Half Dozen in a Wooden Box

WROUGHT WAGON

For Wagon Axle Nuts and Evener Pin; 9½ in. Long; ⅝x8 in. Shank.

	Per Pound
No. 93—Assorted Sizes, 2, 2¼ and 2½ inches in a Bundle	$0 18

Average Weight 18 Lbs. per Dozen

One Dozen in a Bundle

BROAD AXES

Used by Carpenters, Ship and Bridge Builders, Tie Makers, etc. in Hewing and Squaring Large Timbers

Round Cornered, Barton Head

Best Quality Crucible Tool Steel, Perfectly Welded, Beveled, Tempered, Ground and Polished. The Rounded Corners make the Axe Strictly Ready-for-use, without previous grinding. The Eye is unusually close to body of Axe, giving Handle better control. Flat Back, test it either way with Straight Edge. This Pattern is made to our own specifications and embodies the best ideas of practical axemen.

ZENITH, WISCONSIN PATTERN

Warranted; Gold Bronze Finish, Embossed Label, Polished Head and Bit

Nos.	ZW6G	ZW6½G	ZW7G	ZW7½G
Weight, Lbs.	6	6½	7	7½
Width Cut, In.	10½	11	11½	12
Weight Dozen, Lbs.	80	93	98	108
Per Dozen	$42 00	44 00	44 00	46 00

Nos.	ZW8G	ZW8½G	ZW9G	ZW9½G	ZW10G
Weight, Lbs.	8	8½	9	9½	10
Width Cut, In.	12½	13	13½	14	14½
Weight Dozen, Lbs.	114	122	131	135	141
Per Dozen	$46.00	48.00	48.00	50.00	50.00

HAND MADE, WISCONSIN PATTERN

Natural Black Finish

Nos.	XW6B	XW6½B	XW7B	XW7½B
Weight, Lbs.	6	6½	7	7½
Width Cut, In.	10½	11	11½	12
Weight Dozen, Lbs.	80	93	98	108
Per Dozen	$42 00	44 00	44 00	46.00

Nos.	XW8B	XW8½B	XW9B	XW9½B	XW10B
Weight, Lbs.	8	8½	9	9½	10
Width Cut, In.	12½	13	13½	14	14½
Weight Dozen, Lbs.	114	122	131	135	141
Per Dozen	$46.00	48.00	48.00	50.00	50.00

Half Dozen of a size in a Box

ZENITH, CANADA PATTERN

Warranted Best Quality, Crucible Cast Steel, Gold Bronzed, Embossed Label, Polished Head and Bit; Perfectly Welded, Accurately Beveled, Carefully Tempered, Ground and Sharpened. Also the best known of All our Broad Axes.

Nos.	ZC6G	ZC6½G	ZC7G	ZC7½G	ZC8G	ZC8½G
Weight, Lbs.	6	6½	7	7½	8	8½
Width Cut, In.	10½	11	11½	12	12½	13
Weight Dozen, Lbs.	80	93	98	108	114	122
Per Dozen	$42.00	44.00	44.00	46.00	46.00	48.00

Half Dozen of a Size in a Box

BARTON, CANADA PATTERN

Round Corners

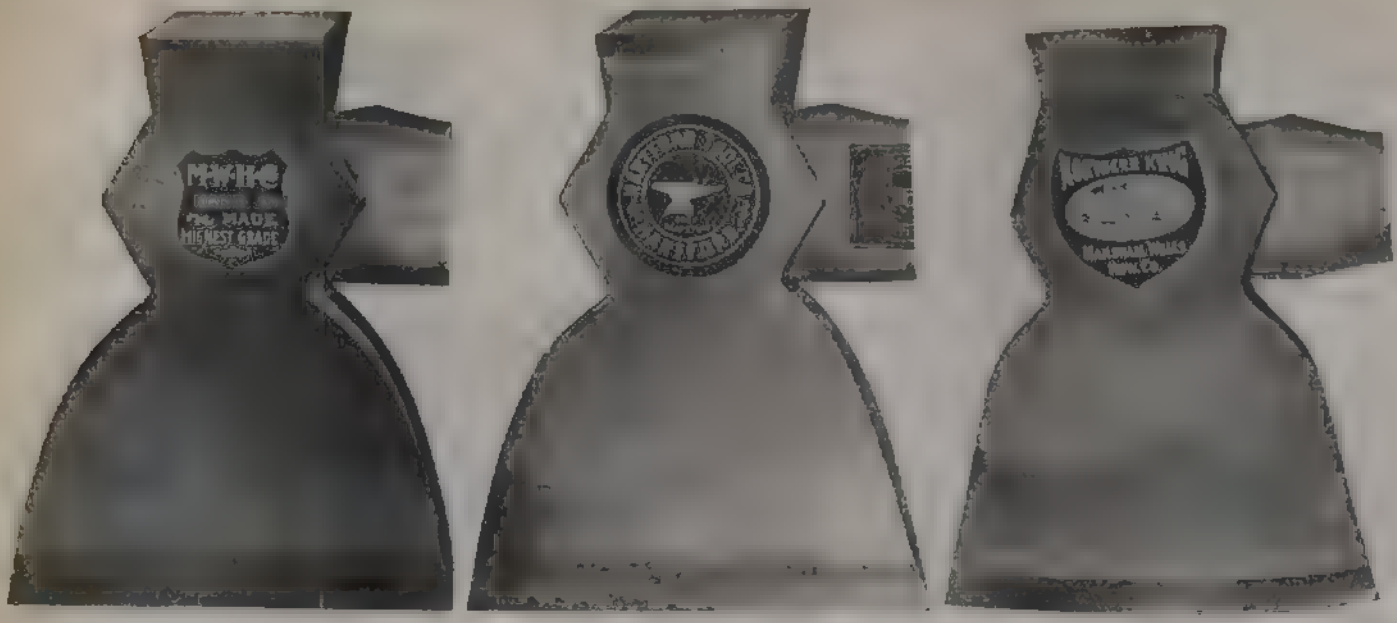
Fine Cast Steel Black Finish Blue Label Polished Head and Bit. Bit has slight Timber Spring which prevents binding; Handle lies close to Bit, giving perfect control and preventing binding.

	Per Dozen
No. BC6½B Round Corners, Assorted Weights 6½ to 7½ Lbs.	$45 00

Half Dozen Assorted Sizes in a Box
Average Weight 100 Lbs. per Dozen

Note—Widths of Cuts are Approximate

BROAD OR BENCH HATCHETS



HAND MADE, Natural Finish

Natural Black Finish, Taper Shaped Box Eye; Crucible Steel Razor Edge requires very little grinding. Selected Hickory Shaped Handle

Nos	Size	Cut	Wt. Doz.	Per Doz.
XB1B	1	3½ in.	21 Lbs.	$12.00
XB2B	2	4½ in.	25 Lbs.	13.00
XB3B	3	5 in.	30 Lbs.	15.00
XB4B	4	5½ in.	40 Lbs.	16.50
XB5B	5	6 in.	45 Lbs.	18.50
XB6B	6	6½ in.	50 Lbs.	20.00

HARTFORD, Gold Bronzed

Extra Quality Tool Steel, Polished Bit and Head, Crucible Steel Cutting Edge, Perfectly Tempered, Ground and Honed; Selected Hickory, Shaped Handle.

Nos	Size	Cut	Wt. Doz.	Per Doz.
HB2G	2	4½ in.	25 Lbs.	$11.50
HB3G	3	5 in.	30 Lbs.	13.00
HB4G	4	5½ in.	40 Lbs.	14.50
HB5G	5	6 in.	45 Lbs.	16.50

Half Dozen in a Box

NORTHERN KING, Gold Bronzed

Steel, Polished Bit and Head well laid out; Selected Hickory Handle.

Nos.	Size	Cut	Wt. Doz.	Per Doz.
NB2G	2	4½ in.	25 Lbs.	$ 9.00
NB3G	3	5 in.	30 Lbs.	10.50
NB4G	4	5½ in.	40 Lbs.	12.00
NB5G	5	6 in.	45 Lbs.	14.00

Arrow Quality Catchers' Mitts

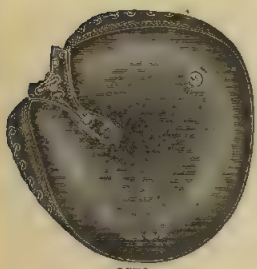
All of our Mitts have all the latest improvements, which are essential to good playing. Patented lacing device, laced thumb, deep pocket, strap and buckle at wrist, and padded with best grade felt, hand moulded to proper shape. New in design and construction. We have given to these models the best of our knowledge and experience, and no expense has been spared in making them the best that can be produced at any price.

8570

8570 Archer Model catcher's Mitt. Made of the finest black French calfskin, specially reinforced with sole leather under band, hand made asbestos felt padding, cut and constructed so as to make a very deep perfect pocket, all black leather bound, black welted seams, sewed with best waxed linen thread, strap and buckle back, absolutely the best catcher's Mitt produced at any price. Packed one in a box. Each.....$14 00

8571

8571 Special Prof. Model. Made of finest black French calfskin, cut and constructed same as 8570, a very deep perfect pocket. A Mitt without a fault. Packed one in a box. Each.....$12 00



8572

8572 Men's Regulation League. Laced Catchers' Mitt. Made of the finest procurable No. 1 all black grain horsehide. Welted seams, sewed with best waxed linen thread. Bound in black leather and double stitched. Modeled and constructed so as to make a deep, perfect pocket. Adjustable patent thumb-piece. Inspected and guaranteed not to rip. Exceptional value. Packed one in box. Each.....$10 00

8573

8573 Men's Regulation Style. Laced Catchers' Mitt. Made of best No. 1 black grain calfskin. Double stitched fingers and back. Patent adjustable thumb. Very serviceable; guaranteed not to rip. Packed one in a box. Each.....$4 00

8574

8574 Men's Regular Catchers' Mitt, Laced. Palm is first quality white pearl, chrome tanned sheepskin. Back, band and finger is same grade black sheepskin; adjustable laced thumb; nicely pocketed and padded; guaranteed. Packed one in a box. Each.....$2 00

8576

8575 Youth's Catcher's Mitt. Good quality, chrome tan sheepskin palm, red sheepskin back, band and fingers leather bound. Well padded and nicely made. Adjustable thumb; guaranteed. Each.....$1 00

8576 Boy's Catcher's Mitt. Made of good quality, all red sheepskin throughout, properly padded and pocketed. Bound with leather and double stitched; guaranteed. Each.....$0 50

Don't Be Afraid to Write Us. We Want to Correspond With You.

We Don't Expect a Check in Every Letter.

"THE HOUSE OF QUALITY"

Heinie Wexler, the famous little mascot of the Cleveland "Naps," is a great KING Air-Rifle fan.

GOOD marksmanship begins with choosing the right gun—one that will shoot straight, and is the right size for your age and strength.

You can depend on any of the beautiful KING models shown on the opposite page. Every one is strong and accurate, just like a real rifle in appearance, but not dangerous, like a powder-gun.

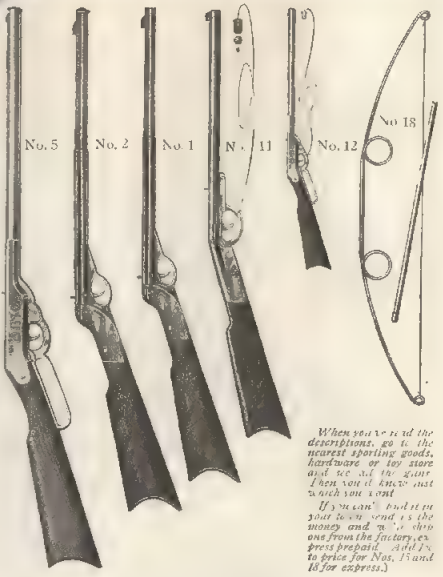
KING target-practice is one of the finest of sports, indoor or out, and teaches you the many manly qualities of the true sportsman.

Read descriptions of all the guns carefully and make the choice of your air-rifle a wise one.

The name "KING" always shown on barrel or side-plate makes you sure your gun was made by the inventors of the air-rifle, the world's original and foremost makers of highest grade air-rifles.

KING AIR RIFLES

Every Boy's Choice



No. 5.—The big, Lever-Action Repeaters, for the older boys and girls, head the list. There's No. 5 that holds a thousand Air-Rifle shot in its magazine and sells for $2.00. (No. 5-B, gun metal finish [$2.50] and No. 4, the 500-shot, just like No. 5, but 34 inches long instead of 36, selling for $1.75.)

No. 2.—For boys and girls a little younger, the Break-Down Hammerless Repeaters are splendid guns. This is No. 2, whose magazine holds 350 shot. It's 31 inches long and sells for $1.25.

No. 1.—It's often wise for the beginner to select this No. 1, Single Shot. It has the same Break Down action as No. 2, but hasn't a magazine. It is very easy to handle, teaches you to be accurate and careful and not to waste your shots. Price, $1.00.

No. 11.—Here's all kinds of fun for boys and girls of all ages. It's the famous "Three-in-One" (No. 11), that shoots Air-Rifle Shot, rubber ball, or cork on a long cord. Fun for indoors or out. Price, 75c.

No. 15.—The little tots from three to six get a world of pleasure out of the No. 15, the King Safety-Lever Pop-Gun. Looks just like the big 1000-shot but is only 17 inches long. The special lever-action works easily and can't pinch the fingers. It shoots a cork with a loud "pop" and costs only 25c. The No. 12 is another 25-cent favorite. There's also the No. 14, that shoots a rubber ball accurately 35 feet. It's the very thing for children who are too old for a pop-gun and too young for an air-rifle. Price, 50c.

No. 18. One of the prime favorites of the King line is the Steel-Spring Bow and Arrow "Sioux Chief." You can't break it or wear it out, and the rubber-tipped, hardwood arrow does no damage. For big children as well as little. And it costs only 25c.

When you've read the descriptions, go to the nearest sporting goods, hardware or toy store and let us know just which you want.

If you can't find it in your town, send us the money and we'll ship one from the factory, express prepaid. Add 25c to price for Nos. 1 and 18 for express.)

The Markham Air-Rifle Co.

Inventors and Oldest Manufacturers of the Air-Rifle,

PLYMOUTH, MICH., U. S. A.

Pacific Coast Office . . . . 727 Market Street, San Francisco.
Phil B. Bekeart Co., Managers

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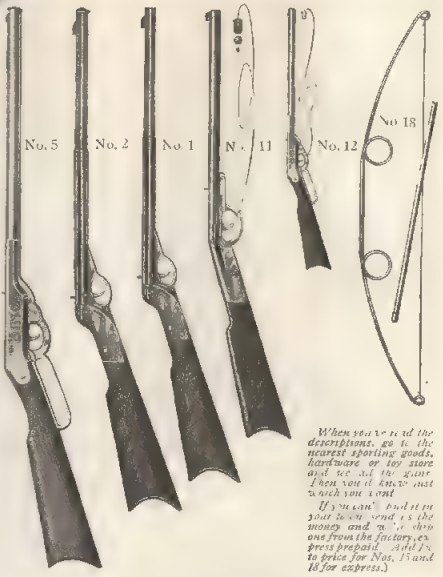

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Pacific Coast Office . . . . 727 Market Street, San Francisco.
Phil B. Bekeart Co., Managers

This Page was Printed on This Machine

HERE is a sample of Multigraph printing. More than a million copies were required for this issue of Cosmopolitan.

With such an evidence of quality and output before you, picture the possibilities of Multigraph printing in your own business, for your advertising or stationery. Hints for money-making, money-saving or added convenience are detailed below.

The Multigraph: Complete Unit for printing and form-typewriting

The Multigraph will do Your Own Printing, in the Privacy of Your Own Office, and Save 25% to 75%

ORIGINALLY designed for form-typewriting only, the Multigraph has been developed into a rapid rotary printing-machine for office use.

It occupies just about the space of the average typewriter desk; is light enough to move from room to room; and takes its power, when power is required, from any electric lamp-socket.

Fed by hand or automatically, it prints or typewrites at the rate of 1,200 to 5,000 sheets an hour. It can be operated by your own employees—any young man or woman of average ability.

It does the work when you want it, in quantities as small or as large as you like. It saves the room required to store large quantities of printing, and saves the waste on soiled or out-of-date forms. It is always ready; and when it is idle it isn't eating its head off.

What You Can Do with the Multigraph

THE Multigraph is a resourceful machine. Users are daily finding new applications for its money-making and money-saving functions.

One of its big advantages is that it deals with situations as they arise. To enumerate all of its uses would be impossible; but we list a few broad hints of its more common uses, as follows:

BOOKLETS—This insert gives a clear idea of Multigraph printing as applied to the inside pages of booklets. You can do printing of equal quality on many kinds and colors of various stocks, with beautiful results. Booklets may also be typewritten on the Multigraph. The very novelty of the thing gives attention-value. One such booklet sold goods to one out of every four who received it.

(OVER)

This Page and the reverse Printed wholly on the **MULTIGRAPH**

This Page and the reverse Printed wholly on the MULTIGRAPH

ENVELOPE-STUFFERS—Print them from electrotypes when you wish; but when you're "up against it" you can use the Multigraph type.

FOLDERS—Use as many colors as you please—on almost any paper. Some users get good effects by printing the border and illustrations, and typewriting the subject-matter.

HOUSE-ORGANS—Some people print them from electrotypes; others from the machine's self-contained type. We use plates for a monthly, and typewriter type for a house-organ we issue weekly, or oftener, to our own employees. Ask us for a copy.

IMPRINTS—Business houses that operate their own private printing-plants are imprinting labels and dealers' literature on the Multigraph—saving time, trouble and money.

What Uses Are You Most Interested In?

Check them on this slip and enclose it with your request for information, *written on your business stationery*. We'll show you what others are doing

AMERICAN MULTIGRAPH SALES CO.

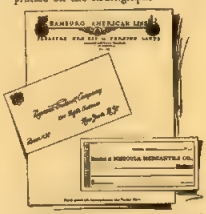
Printing:

- ☐ Booklets
- ☐ Folders
- ☐ Envelope-Stuffers
- ☐ House-Organ
- ☐ Dealers' Imprints
- ☐ Label Imprints
- ☐ System-Forms
- ☐ Letter-Heads
- ☐ Bill-Heads and Statements
- ☐ Receipts, Checks, etc.
- ☐ Envelopes

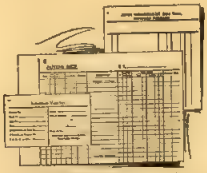
Typewriting:

- ☐ Circular Letters
- ☐ Booklets
- ☐ Envelope-Stuffers
- ☐ Price-Lists
- ☐ Reports
- ☐ Notices
- ☐ Bulletins to Employees
- ☐ Inside System-Forms

LETTERS—You probably know that the Multigraph typewrites circular letters so that the name and address can be perfectly matched-in on a correspondence machine. But here's a thought: Make your letter short, and put the details into an enclosure printed on the Multigraph.



STATIONERY—The Multigraph is printing stationery for many business-houses—letter-heads, bill-heads, statements, envelopes, acknowledgments, receipts, order-blanks, checks—saving hundreds and thousands of dollars a year.



SYSTEM-FORMS—Those that go outside should be printed on the Multigraph to save money. But those to be used inside your office, store or factory can be typewritten on the Multigraph, saving more money. A lot of the forms you use could be pounded out on the typewriter if your stenographers had the time. Typewrite them on the Multigraph.

How the Multigraph Prints

DISTRIBUTE the ink, and insert a form or fasten an electrotype on the printing-drum—the work of five or ten minutes. Load and adjust the automatic feed—the work of five minutes more. Then begin at once to print—at the rate of 1,200 to 5,000 sheets an hour!

There's none of the bothersome "make-ready" that requires so much skill and eats up so much of the time of the ordinary printing-press. Accurate contact takes the place of heavy pressure.

There are three ways of printing with real printing-ink on the Multigraph:

1. By using the machine's self-contained equipment of typewriter or Gothic type.

2. By using hand-set display-type made in many sizes and faces especially for the Multigraph. This type is especially valuable for headings in connection with the self-contained type.

3. By means of unmounted electrotypes, curved to fit the Multigraph printing-drum. Thus you can reproduce any form set by yourself or your printer—including any size or face of type, line-cuts, borders, ornaments and tint-blocks. This insert was printed from electrotypes.

And any No. 4 Multigraph can be transformed into a complete unit by adding the necessary features: the tubular stand, printing-ink attachment, automatic feed, and electric motor. All parts are made interchangeable, so there's no fitting, filing or delay.

You can't buy a Multigraph unless you need it

BEFORE we'll take your money, your own business must show that it has a profitable application for the Multigraph. But we'll be glad to help you dig up the evidence.

Ask us for literature, samples, and data pertaining to your line of business. Write today. Use the coupon.

The American Multigraph Sales Co.

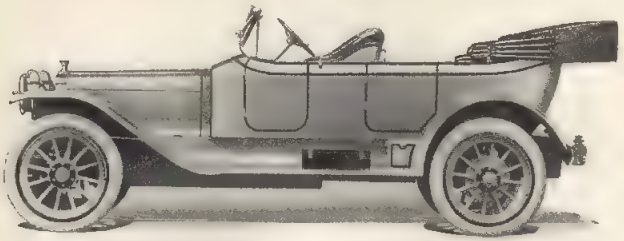
Executive Offices
1824 E. Fortieth Street

Cleveland Ohio U.S.A.

Branches in Sixty Cities
Look in Your Telephone Directory

European Representatives: The International Multigraph Company, 59 Holborn Viaduct, London, England; Berlin, W-8 Kranzenstr., 70 Ecke Friedrichstr.

This Page and the reverse Printed wholly on the MULTIGRAPH



Straining Your Imagination At Your Own Expense

VALUE that can't be shown and proved, but has to be *imagined,* is a delusion.

You can *see* physical value equal to the price in the 48 H. P. Winton Six. Its size, workmanship, power, sturdiness, beauty, and comfort are clearly apparent. You don't have to stretch and strain your imagination to realize that the Winton Six has every quality that a thoroughly valuable car ought to have and that it lacks nothing in appearance or performance.

A Difference Not in the Car, But in Price Only

But you will look *in vain* in steep-priced cars of similar power and size for any equivalent of the higher price. That's because the difference is *not* in the car: it is a difference in *price only.*

This price difference does not make the super-priced car look finer, run better, or last longer.

To prefer any such car to the Winton Six, you must first *strain your imagination,* and then *penalize your checkbook* $1000 or more.

And when you do that, just remember that you are paying this excess $1000 or more, *not* for anything the maker puts into the car, but for your own personal imagination--and imagination isn't any part of a real automobile.

Paying $602.38 for Something You Don't Get

We are able to prove that on six different makes of well-known, high-priced cars, the buyer is forced to pay $602.38 per car for excessive capitalization, and interest and sinking fund charges. These figures are real: the calculation is based on a compilation made from commercial reports by Haskins & Sells, famous certified public accountants.

Let us send you the figures in detail and the whole story. Ask for our "Price Information." With it we will send our 64-page, library-size catalog that gives complete information about the superb Winton Six, the $3000 car that has no competition below $4000, and no superior at any price. Write today.

The Winton Co. guarantees every statement made in
WINTON SIX
advertising to be true without qualification

THE WINTON MOTOR CAR CO.
103 Berea Road - - - Cleveland, O.

Branch Houses in New York, Boston, Philadelphia, Baltimore, Pittsburg, Cleveland, Detroit, Milwaukee, Chicago, Minneapolis, Kansas City, San Francisco, and Seattle.

O. Henry

New Facts about the Great Author by Harry Peyton Steger, and a Hitherto Unpublished Story by O. Henry Himself

IT is fitting that this account of what remains unpublished of O. Henry's work should appear in COSMOPOLITAN, because the last story he wrote, "Adventures in Neurasthenia," and the very last piece of work he began, "The Dream," were both published in that magazine. In this present issue appears, too, "A Fog in Santone," which is, so far as my knowledge goes, the only story written in his New York days that has not already had magazine publication. I do not know exactly when he wrote this splendid story, but I know that its germ was long in his mind. I have a letter of his, written to a friend in San Antonio, creating the very atmosphere in his description of the pure-aired Texas town and its hosts of "patients." And "Adventures in Neurasthenia"! That bubbling yarn is, to those who know the last few months of his life, nothing more nor less than a log of his journey's end.

When Will Porter, bound for Texas, left Greensboro, North Carolina, in 1883, he took with him letters that bore witness to his good character—and his ability as a drug-clerk. Nearly thirty years later I decided to follow some of the earlier trails of O. Henry and found these very letters, in an old envelope bearing a brown two-cent stamp and the superscription "Recommendations." I think that Mrs. Roach, his mother-in-law, who gave them to me, had kept them all those years because she knew their importance. She believed all along that "Will" was a genius, and forgave him even his "running away with" Athol, her only child. "Will" always got what he wanted, and he decided that he wanted seventeen-year-old Athol. Charlie Anderson and his wife will tell you how the two young people drove

Two portraits of O Henry, who spent most of his life in country towns and then won world-wide fame with stories of the metropolis

up to the Anderson house in a buggy and asked for help in their elopement, and how later he made peace for them. But all this is ancient history now, and the dashing youth who would have what he wanted has become O. Henry in twelve volumes.

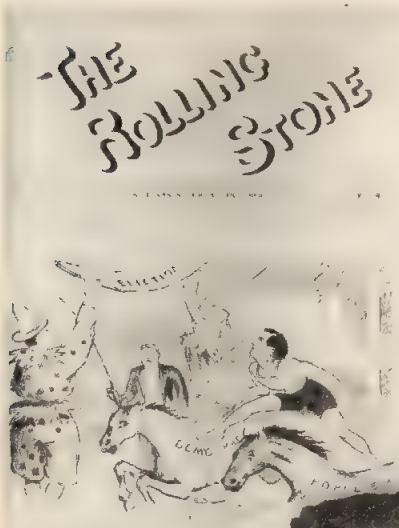
In Austin, Texas, O. Henry spent fourteen years, and in Austin, Texas, I spent four college years. Our times lapped by only one year, and the freshman knew not that the wizard was around the corner, but my acquaintance there helped me in my search when I went there in January of this year. The first ten days on the ground showed me that Will Porter (it was only in his post-Texan days that people called him "Sydney," I believe) was known to hundreds and that few knew him. In his twenties and later in New York, he was the same lone wolf. There came many who "knew him when," and some, of course, who volunteered to doubt the genuineness of his fame and the disinterestedness, or at least the sanity, of my pilgrimage. Now this was not because Austin, Texas, is a jay-town. It isn't. It is the beautiful, hill-jeweled capital of the Lone Star State and the seat of a great university. O. Henry was suffering merely the time-honored fate of the prophet among his familiars. But to his charm and brilliance all bear witness, and there are many who surely saw in the shy, gentle soul far more than the clever draftsman of the Land Office or of Maddox Brothers and Anderson, Land Agents, far more than the paying and receiving teller of old Major Brackenridge's bank. They will tell you how he caricatured the population and cartooned Dave Harrell's famous trip to New York City, how he sang in the Hill City Quartet with Howard Long, C. E. Hillyer, and Dick Edmondson, how he wrote a yarn for a local paper that started everybody—including himself—digging for buried treasure! So it is easy to see that his sudden "arrival" in New York ten years ago had a long road back of it. He had been writing for years.

All the time he was in Austin, he sent out stories and verse to editors. I have rejection slips as far back as 1887—and an acceptance from *Puck* in 1890! *Puck*, *Truth*, *Up-to-Date*, the Detroit *Free Press*, and some of the New York Sunday papers bought paragraphs from him. During 1895—1896 he wrote a column in the Houston (Texas) *Post* under the title of "Postscripts." Here, too, as in the early letters I found and in *The Rolling Stone*, appeared many little turns of phrase and fancy that afterward give their unique quality to the work of the chronicler of the four million.

The most definite record of his early work is contained in *The Rolling Stone*. Porter had told me in New York of this weekly paper's existence, and for three years I had tried in vain to find a copy. Many people in Austin remembered the paper and could recall some of its pleasantries; but a paper, obscure in its lifetime, is hard to find after sixteen years, and I despaired of success. Then came Doctor R. J. Brackenridge, of Austin, with the belief that copies were among his dead brother's old papers. It was with this brother, Major Brackenridge, that Porter had worked in the nineties as bank-teller. *We found them*—twenty-four different issues and a dozen duplicates of one issue, buried under many years' copies of the Congressional Record.

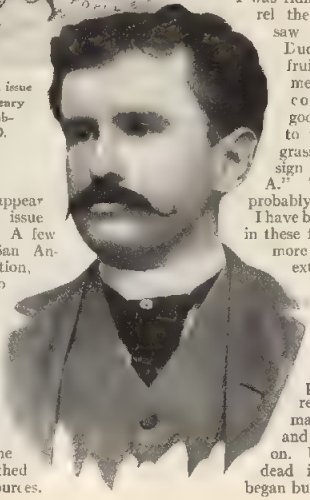
Although his name appears on but one of the numbers we found, we know by many proofs that he was "editor and proprietor" of the little sheet, and that the clever cartoons and illustrations are his. The circulation of *The Rolling Stone* never went beyond a thousand copies. How complete is the file I finally managed to assemble I shall never know, but I do know that when the editor and proprietor succumbed to measles, the paper suspended publication! Then, too, according to Dixie Daniels, now Dr. Daniels of Galveston, Texas, and then for many months business manager, advertising solicitor, managing editor, and typesetter of *The Rolling Stone*, they had great trouble in keeping their serial numbers in the proper sequence, so that Volume 1, Number 5, did not inevitably follow Volume 1, Number 4. The paper varied, too, in size and content. Bill Nye, in this day, was at his height, and the Nye syndicate page was popular with Porter, especially when time or printer pressed; but this feature was abruptly discontinued one day when the stereotypes came by express C. O. D. Perhaps the business office of *The Rolling Stone* was not always prompt in its remittances, and Bill Nye may have lost his sense of humor when he couldn't collect a bill.

The first issue I found of *The Rolling Stone* is dated at Austin, April 28, 1894. It was the third number published, apparently. The motto was, "Out for



Reduced facsimile of the front page of an issue of "The Rolling Stone," which O Henry founded and edited and in which he published much of his early work.—O. Henry about the time he was editing "The Rolling Stone"

the Moss," and it claimed to appear every Saturday. The latest issue bears the date April 27, 1895. A few numbers carry "Austin and San Antonio" as the offices of publication, and there is one San Antonio edition in which the "illustrations" of that city's prominent buildings are all breweries! This issue is particularly good. Indeed, *The Rolling Stone* is so full of good things that it seems strange for no body to remember it clearly and for copies of it to be so rare. Besides this one big find in the Brackenridge papers, I unearthed only five issues from other sources.



Some of Porter's letters I have were written to his daughter Margaret when she was eight years old and was with her grandparents near Nashville. "Dear Margaret," runs one. "Here it is summertime, and the bees are blooming and the flowers are singing and the birds making honey and we haven't been fishing yet." Here is one in which he plays the part of a Brownie. It was evidently his intention to send the little girl other notes in the same rôle: "Hello, Margaret. Don't you remember me? I'm a Brownie, and my name is Aldibirontiphostiphornikophokos. If you see a star shoot and say my name seventeen times before it goes out, you will find a diamond ring in the track of the first blue cow's foot you see go down the road in a snowstorm while the red roses are blooming on the tomato vines. Try it some time. I know all about Anna and Arthur Dudley, but they don't see me. I was riding by on a squirrel the other day and saw you and Arthur Dudley give some fruit to some trainmen. Anna wouldn't come out. Well, good-by, I've got to take a ride on a grasshopper. I'll just sign my first letter—A." This was written probably in 1899.

I have been able, of course, in these few pages to do no more than indicate the extent of the material already gathered. I feel that the surface has been but scraped and that now is the time to make a complete biographical record of a great man who has gone and whose work stays on. Unknown in 1900, dead in 1910, his life began but yesterday.

"An hour ago I wanted to die, but since I've met you, Miss Rose, I'd like, so much, to live." The young woman whirls around the table, lays an arm behind his neck, and kisses him on the cheek. "You must, dear boy," she says

("*A Fog in Santone*")

A Fog in Santone

By O. Henry

Author of "The Four Million," "The Trimmed Lamp," "Adventures in Neurasthenia," etc.

Illustrated by John Alonzo Williams

This O. Henry story is a "find." Mr. Steger, O. Henry's literary executor, unearthed it among some of the author's effects at his old home in Austin, Texas; and as Mr. Steger's search was pretty thorough, it is undoubtedly the only O. Henry story which has not hitherto been published. It is doubly interesting because it shows the real O. Henry ten years ago before his work began to be known. And it is especially fitting that the story should be given to Cosmopolitan readers, since for you O. Henry wrote the last story that came from his pen

THE drug-clerk looks sharply at the white face half concealed by the high upturned overcoat collar. "I would rather not supply you," he says doubtfully. "I sold you a dozen morphia tablets less than an hour ago."

The customer smiles wanly. "The fault is in your crooked streets. I didn't intend to call on you twice, but I guess I got tangled up. Excuse me."

He draws his collar higher, and moves out, slowly. He stops under an electric light at the corner, and juggles absorbedly with three or four little pasteboard boxes.

"Thirty-six," he announces to himself. "More than plenty."

For a gray mist had swooped upon Santone that night, an opaque terror that laid a hand to the throat of each of the city's guests. It was computed that three thousand invalids were hibernating in the town. They had come from by and wide, for here, among these contracted, river-sliced streets, the Goddess Ozone has elected to linger.

Purest atmosphere, sir, on earth! You might think from the river winding through our town that we are malarial, but no, sir! Repeated experiments made by both government and local experts show that our air contains nothing deleterious—nothing but ozone, sir, pure ozone. Litmus-paper tests made all along the river show—but you can read it in all the prospectuses; or the Santonian will recite it for you, word by word.

We may achieve climate, but weather is thrust upon us. Santone, then, cannot be blamed for this cold, gray fog that came and kissed the lips of the three thousand, and then delivered them to the cross. That night the tubercles, whose ravages hope holds in check, multiplied. The writhing fingers of the pale mist did not go thence bloodless. Many of the wooers of ozone capitulated with the enemy that night, turning their faces to the wall in that dumb, isolated apathy that so terrifies their watchers. On the red stream of Hemorrhagia a few souls drifted away, leaving behind pathetic heaps, white and chill as the fog itself. Two or three came to view this atmospheric wraith as the ghost of impossible joys, sent to whisper to them of the egregious folly it is to inhale breath into the lungs, only to exhale it again, and these used whatever came handy to their relief—pistols, gas, or the beneficent muriate.

The purchaser of the morphia wanders into the fog, and, at length, finds himself upon a little iron bridge, one of the score or more in the heart of the city under which the small, tortuous river flows. He leans on the rail and gasps, for here the mist has concentrated, lying like a footpad to garrote such of the Three Thousand as creep that way. The iron bridge-guys rattle to the strain of his cough, a mocking, phthisical rattle, seeming to say to him: "Clackety-clack! just a little rusty cold, sir, but not from our river. Litmus paper all along the banks and nothing but ozone. Clackety-clack!"

The Memphis man at last recovers sufficiently to be aware of another overcoated man ten feet away, leaning on the rail, and just coming out of a paroxysm. There is a freemasonry among the Three Thousand that does away with formalities and introductions. A cough is your card; a hem-

orrhage a letter of credit. The morphia man, being nearer recovered, speaks first:

"Goodall: Memphis. Pulmonary tuberculosis. Guess last stages."

The Three Thousand economize on words. Words are breath, and they need breath to write checks for the doctors.

"Hurd," gasps the other. "Hurd, of T'leder. T'leder, Ah-hia. Catarrhal bronkeetis. Name's Dennis, too—doctor says. Says I'll—live four weeks if I—take care of myself. Got your walking papers yet?"

"My doctor," says Goodall, of Memphis, a little boastingly, "gives me three months."

"Oh," remarks the man from Toledo, filling up great gaps in his conversation with wheezes, "blast the difference. What's months! Expect to—cut mine down to one week—and die in a hack—a four-wheeler, not a cough. Be considerable moanin' of the bars when I put out to sea. I've patronized 'em—pretty freely since I struck my—present gait. Say, Goodall, of Memphis—if your doc has set your pegs so close—why don't you—get on a big spree and go—to the devil quick and easy—like I'm doing?"

"A spree!" says Goodall as one who entertains a new idea. "I never did such a thing. I was thinking of another way, but—"

"Come on," invites the Ohioan, "and have some drinks. I've been at it—for two days, but the infernal stuff won't bite like it used to. Goodall, of Memphis, what's your respiration?"

"Twenty-four."

"Daily temperature?"

"Hundred and four."

"You can do it in two days. It'll take me a—week. Tank up, friend Goodall, have all the fun you can, then -off you go, in the middle of a jag, and s-s-save trouble and expense. I'm a s-son of a gun if this ain't a health resort—for your whiskers! A Lake Erie fog'd get lost here in two minutes."

"You said something about a drink," says Goodall.

A few minutes later they line up at a glittering bar, and hang upon the arm-rest. The bartender, blond, heavy, well groomed, sets out their drinks, instantly perceiving that he serves two of the Three Thousand. He observes that one is a middle-aged man, well dressed, with a lined and sunken face; the other a mere boy, who is chiefly eyes and overcoat. Disguising well the tedium begotten by many repetitions, the server of drinks begins to chant the sanitary saga of Santone.

"Rather a moist night, gentleman, for our town. A little fog from our river, but nothing to hurt. Repeated tests."

"Blast your litmus papers," gasps Toledo, "without any—personal offense intended. We've heard of 'em before. Let 'em turn red, white, and blue. What we want is a repeated test of that—whiskey. Come again. I paid for the last round, Goodall, of Memphis."

The bottle oscillates from one to the other, continues to do so, and is not removed from the counter. The bartender sees two emaciated invalids dispose of enough Kentucky Belle to floor a dozen cowboys without displaying any emotion save a sad and contemplative interest in the peregrinations of the bottle. So he is moved to manifest a solicitude as to the consequences.

"Not on your Uncle Mark Hanna," responds Toledo, "will we get drunk. We've been—vaccinated with whiskey and—cod-liver oil. What would send you to the police station—only gives us a thirst. S-s-set out another bottle."

It is slow work trying to meet death by that route. Some quicker way must be found. They leave the saloon and plunge again into the mist. The sidewalks are mere flanges at the base of the houses, the street a cold ravine, the fog filling it like a freshet. Not far away is the Mexican quarter. Conducted as if by wires, along the heavy air comes a guitar's tinkle, and the demoralizing voice of some señorita singing:

En las tardes sombrillos del invierno
En el prado a Morar me reclino,
Y mal digo mi fausto destino—
Una vida la más infelix.

The words of it they do not understand—neither Toledo nor Memphis—but words are the least important things in life. The music tears the breasts of the seekers after Nepenthe, inciting Toledo to remark:

"Those kids of mine—I wonder—by God, Mr. Goodall, of Memphis, we had too little of that whiskey! No slow music in mine, if you please. It makes you disremember to forget."

Hurd of Toledo here pulls out his watch, and says:

"I'm a son of a gun! Got an engagement for a hack ride out to San Pedro Springs at eleven. Forgot it. A fellow from Noo York,

and me, and the Castillo sisters at Rhinegelder's Garden. That Noo York chap's a lucky dog—got one whole lung—good for a year yet. Plenty of money, too. He pays for everything. I can't afford—to miss the jamboree. Sorry you ain't going along. Good-by, Goodall, of Memphis."

He rounds the corner and shuffles away, casting off thus easily the ties of acquaintanceship, as the moribund do, the season of dissolution being man's supreme hour of egoism and selfishness. But he turns and calls back through the fog to the other:

"I say, Goodall, of Memphis! If you get there before I do, tell 'em Hurd's a comin' too. Hurd, of T'leder, Ahhia."

Thus Goodall's tempter deserts him. That youth, uncomplaining and uncaring, takes a spell at coughing, and, recovered, wanders desultorily on down this street, the name of which he neither knows nor recks. At a certain point he perceives swinging doors, and hears, filtering between them, a noise of wind- and string-instruments. Two men enter from the street as he arrives, and he follows them in. There is a kind of antechamber, plentifully set with palms and cactuses and oleanders. At a little marble-top table some people sit, while soft-shod attendants bring the beer. All is orderly, clean, melancholy-gay; of the German method of pleasure. At his right is the foot of a stairway. A man standing there holds out his hand. Goodall extends his, full of silver, and the man selects therefrom a coin. Goodall goes upstairs, and sees there two galleries extending along the sides of a concert-hall which he now perceives to lie below and beyond the anteroom he had first entered. These galleries are divided into boxes or stalls which bestow, with the aid of hanging lace curtains, a certain privacy upon their occupants.

The customer smiles wanly. "The fault is in your crooked streets. I didn't intend to call on you twice, but I guess I got tangled up. Excuse me"

Passing, with aimless feet, down the aisle contiguous to these saucy and discreet compartments, he is half checked by the sight, in one of them, of a young woman, alone, and seated in an attitude of reflection. This young woman becomes aware of his approach. A smile from her brings him to a standstill, and her subsequent invitation draws him, though hesitating, to the other chair in the box, a little table between them.

Goodall is only nineteen. There are some whom, when the terrible god Phthisis wishes to destroy, he first makes beautiful; and the boy is one of these. His face is wax, and an awful pulchritude is born of the menacing flame in his cheeks. His eyes reflect an unearthly vista engendered by the certainty of his doom. As it is forbidden man to guess accurately concerning his fate, it is inevitable that he shall tremble at the slightest lifting of the veil.

The young woman is well dressed, and

exhibits a beauty of a distinctly feminine and tender sort; an Eve-like comeliness that seems scarcely predestined to fade.

It is immaterial, the steps by which the two mount to a certain plane of good understanding; they are short and few, as befits the occasion.

A button against the wall of the partition is frequently disturbed, and a waiter comes and goes at its signal. Pensive Beauty would have nothing of wine; two thick plaits of her blond hair hang almost to the floor; she is a lineal descendant of the Lorelei. So the waiter brings the brew; effervescent, icy, greenish golden. The orchestra on the stage is playing "Oh, Rachel." The two youngsters have exchanged a good bit of information. She calls him "Walter," and he calls her "Miss Rosa."

Goodall's tongue is loosened, and he has told her everything about himself—about his home in Tennessee, the old pillared mansion under the oaks, the stables, the hunting, the friends he has; down to the chickens, and the box bushes bordering the walks. About his coming South for the climate, hoping to escape the hereditary foe of his family. All about his three months on a ranch; the deer hunts, the rattlers, and the rollicking in the cow-camps. Then of his advent to Santone, where he has indirectly learned from a great specialist that his life's calendar probably contains but two more leaves. And then of this death-white, choking night which has come and strangled his fortitude, and sent him out to seek a port amid its depressing billows.

"My weekly letter from home failed to come," he told her, "and I was pretty blue. I knew I had to go before long, and I was tired of waiting. I went out and bought morphine at every drug-store where they would sell me a few tablets. I got thirty-six quarter-grains, and was going back to my room and take them, but I met a queer fellow on a bridge, who had a new idea." Goodall fillips a little white pasteboard box upon the table. "I put 'em all together in there."

Miss Rosa, being a woman, must raise the lid. She gives a slight shiver at the innocent-looking triturates. "Horrid things! But those little, white bits—they could never kill one!"

Indeed they could. Walter knows better. Nine grains of morphia! Why, half the amount might.

Miss Rosa demands to know about Mr. Hurd, of Toledo, and is told. She laughs like a delighted child. "What a funny fellow! But tell me more about your home and your sisters, Walter. I know enough about Texas and tarantulas and cowboys."

The theme is dear, just now, to his mood, and he lays before her the simple details of a true home; the little ties and endearments that so fill the exile's heart. Of his sisters, one, Alice, furnishes him a theme he loves to dwell upon.

"She is like you, Miss Rosa," he says. "Maybe not quite so pretty, but just as nice, and good, and ——"

"There! Walter," says Miss Rosa sharply, "now talk about something else."

But a shadow falls upon the wall outside, preceding a big, softly treading man, finely dressed, who pauses a second before the curtains and then passes on. Presently comes the waiter with a message,

"Mr. Rolfe says——"

"Tell Rolfe I'm engaged."

"I don't know why it is," says Goodall, of Memphis, "but I don't feel as bad as I did. An hour ago I wanted to die, but since I've met you, Miss Rosa, I'd like, so much, to live."

The young woman whirls around the table, lays an arm behind his neck, and kisses him on the cheek.

"You must, dear boy," she says. "I know what was the matter. It was this miserable foggy weather that has lowered your spirit and mine too—a little. But look now!"

With a little spring she has drawn back the curtains. A window is in the wall opposite, and lo! the mist is cleared away. The indulgent moon is out again, revoyaging the plumbless sky. Roof and parapet and spire are softly pearl enameled. Twice, thrice, the retrieved river flashes back, between the houses, the light of the firmament. A tonic day will dawn, sweet and prosperous.

"Talk of death, when the world is so beautiful!" says Miss Rosa, laying her hand on his shoulder. "Do something to please me, Walter. Go home to your rest, and say, 'I mean to get better,' and then do it."

"If you ask it," says the boy with a smile, "I will."

The waiter brings full glasses. Did

"Not on your Uncle Mark Hanna," responds Toledo. "will we get drunk. We've been—vaccinated with whiskey and —cod-liver oil. What would send you to the police station—only gives us a thirst. S-s-set out another bottle"

they ring? No; but it is well. He may leave them. A farewell glass. Miss Rosa says, "To your better health, Walter." He says, "To our next meeting."

His eyes look no longer into the void, but gaze upon the antithesis of death. His foot is set in an undiscovered country to-night. He is obedient, ready to go. "Good night," she says.

"I never kissed a girl before," he confesses, "except my sisters."

"You didn't this time," she laughs; "I kissed you—good night."

"When shall I see you again?" he persists.

"You promised me to go home," she frowns, "and get well. Perhaps we shall meet again—soon. Good night."

He hesitates, his hat in hand. She smiles broadly and kisses him once more, upon the forehead. She watches him far down the aisle, then sits again at the table.

The shadow falls once more against the wall. This time the big, softly stepping man parts the curtains and looks in. Miss Rosa's eyes meet his, and for half a minute they remain thus, silent, fighting a battle with that king of weapons. Presently the big man drops the curtains, turns, and passes on.

The orchestra ceases playing suddenly, and an important voice can be heard loudly talking in one of the boxes farther down the aisle. No doubt some citizen entertains there some visitor to the town, and Miss Rosa leans back in her chair and smiles at some of the words she catches:

"Purest atmosphere—in the world—litmus paper all along—nothing hurtful—our city—nothing but pure ozone."

The waiter returns for the tray and glasses. As he enters, the girl crushes a little empty pasteboard box in her hand, and throws it in a corner. She is stirring something in her glass with her hatpin.

"Why, Miss Rosa," says the waiter, with the civil familiarity he uses, "putting salt in your beer this early in the night!"

My Recollections of Antietam

By General Nelson A. Miles

FROM NEGATIVE COLLECTION

Major-General George B. McClellan, who at Antietam checked Lee's invasion of the North

The bloodiest day in American history—September 100,000 men, with 500 pieces of artillery, fought Gray to beat a way to the North. McClellan bined losses on this bloody, heroic

EDITOR'S NOTE.—Lee's invasion of the North in the the Civil War. After the first Bull Run the Confederates by a further advance. But in the year that followed, the war their desperate rescue of Richmond in mind Lee's veterans could gain. A victory on Northern soil would probably deporate fighting at Antietam was the result. The following story graphic an account of that bloody day as could be written by fighting, succeeding the gallant Barlow while the sunken road

THE battle of Antietam was one of the most important battles in the Civil War, as well as one of the most sanguinary. It is said that more men were killed and wounded that day than on any other one day of the war.

General Lee, realizing that it was impossible to do anything against the forces in the fortified lines protecting Washington, determined to carry the war into the enemy's country. Campaigning in Maryland would keep the Federal troops away and allow the crops to be gathered in the rich valleys of Virginia. If successful in a general battle with the Army of the Potomac, the result would be of great advantage and possibly decisive for the Southern cause. Lee began his movement via Leesburg on September 3d, crossed the Potomac at the fords near that place on the 4th and 7th of September, and encamped the bulk of his army in the vicinity of Frederick, Maryland, on the 8th. His army was composed of three corps—Longstreet's, Jackson's, and Hood's—with D. H. Hill's separate division and a considerable force of cavalry, under J. E. B. Stuart, and artillery, numbering in all approximately forty-five thousand men.

General McClellan, after the second battle of Bull Run, had been placed in command of all the troops in the defense of Washing

NATURE'S SUPREME DESIRE

MAN is a product of nature.

Nature is the great ocean of intelligence in which we are bathed. It is the Spirit of Life that is everywhere manifest —in animals, birds, bees, butterflies, trees, plants, flowers, and even in the rocks.

We are strong only as we lay hold on the forces of nature, and move with them. Happiness, health, efficiency, and long life are possible only to the individual who obeys the laws of nature. All our difficulties, heartaches, tears and fears and diseases come from violation of nature's rules.

If a man is sent to the penitentiary, it is because he has broken the laws of the land. If he is sent to the hospital, it is because he has violated the laws of nature. In case of being sent to the penitentiary, the man is disgraced, and his one wish is to have society forget. In case he is sent to the hospital, he is supplied a topic of conversation, and often is boastful.

To violate the laws of nature marks the man as criminal just as much as if he violated the laws of the state. And the world is rapidly coming to this view.

As man evolves out of savagery, the manifestations of nature alarm him and fill his soul with fear. He gives personality to the elements, and talks of the God of thunder, of lightning, of the rain, the wind, the snow. And these things are appealed to in an endeavor to placate, cajole, and propitiate. Here we get the basis of all superstition.

Later, instead of praying for rain, we build irrigating ditches, and lo, the prayers of labor are answered. And the desert blossoms like the rose, and the waste places are made green.

From fearing the lightnings and trembling in dread and awe, we harness the electric current, and, in fact, produce it at will.

So we get the proposition: First we fear nature; next, in degree, we understand nature; then we manipulate nature and think for her; and finally we control nature.

The desire of nature is to produce a seeing eye and an understanding heart, and nature never yet betrayed the heart that loved her.

It is nature that plants in the mother-heart the love that is forever loyal, that cares for the unborn babe, feeds it, watches over it, fights for it, protects it, teaches and loves it, not only into being, but into manhood. And nature is with us in old age, and sings us to sleep with a lullaby, as we dream again the dreams of childhood.

At times man has substituted his intellect for nature's promptings. Intellect is a bright blade, newly discovered, which so far man has not fully accustomed himself to. And so, instead of using intellect for his advancement, he has used it to his disadvantage and has cut himself with the tool that was designed to serve him.

Nature rewards her votaries with every blessing. She penalizes those who disregard her, flout her, and despise her, and for them misery and woe await. And these things are now being proclaimed from all pulpits, and all schools and colleges.

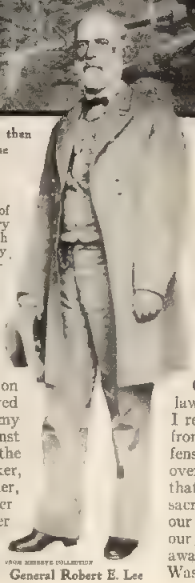
This general reverence of nature, now everywhere in evidence, is slowly but surely evolving a new race. It presages that nature's wish to be loved and understood will eventually be achieved.

What man's life will be when, as a people, we have studied the laws of nature and learned to obey them automatically and through habit, no man can possibly say. And when, at last, nature has produced a being that is a part of herself and yet seemingly stands outside of herself and understands her and loves her, the object of the universe, seemingly, will have been attained.

A complete understanding of nature would be Omnipotence. A man is a god in the chrysalis. And it doth not yet appear what we shall be.

17. 1862. Fifty years ago this month more than for eighteen hours at Antietam—Lee and the and the Blue to keep them back. The comday were more than 25,000 men

summer of 1862 was the first grave crisis of were not in a temper to crown their victory had been carried to their very doors, and with were prepared to press every advantage they stroy the Union. Both sides knew it. The des- of the battle by General Miles is perhaps as any survivor. He was in the thickest of the was getting its baptism as "Bloody Lane."



FROM BROADY COLLECTION

General Robert E. Lee

ton and, discovering that Lee had left his immediate front, crossed three corps to the Maryland side of the Potomac on the 3d of September and followed on the 7th with the rest of the army assigned to active service against Lee. This force consisted of the First Corps under General Hooker, the Second under General Sumner, a division of the Fourth under General Couch, the Fifth under General F. J. Porter, the Sixth under General Franklin, the Ninth under General Burnside, and the Twelfth under General Mansfield—in all, eighty-seven thousand men. Our army was so maneuvered as to cover Washington and Baltimore and to intercept and destroy, if possible, the invading army.

During that campaign I was a lieutenant-colonel of the 61st New York Volunteers, Caldwell's brigade, Richardson's division of the Second Corps, and had served several months with Colonel Francis C. Barlow, a brilliant young lawyer and distinguished soldier. I remember as we were marching from different positions in the defense of Washington the gloom that overshadowed us and the thought that only the heroic efforts and sacrifice of brave men could save our national capital and possibly our government; and as we marched away to the northward, leaving Washington to the south of us,

we wondered if we would ever look upon it again. We had left tens of thousands of our comrades in unknown graves or abandoned upon the battlefields of Virginia, and now our capital was left to the south while we went forth to meet a victorious army confident in the success of its invasion. It was one of the saddest periods of the war and one that tended to create in us the strongest feelings of patriotism.

The army was placed in motion on the ninth with its advance covered by the cavalry under Pleasonton. By the night of the 13th of September the main part of the army was at Frederick, a part of the Ninth Corps some eight miles in advance at Middletown, while the Sixth Corps was five miles to the left and rear at Buckeystown, and Couch in the angle formed by the junction of the Monocacy with the Potomac. When we were at Frederick I first heard the story of Stonewall Jackson and Barbara Frietchie that Whittier afterward immortalized in verse.

McCLELLAN LEARNS LEE'S PLANS

General Lee's lines of communication through the valley of the Shenandoah were obstructed by a detached command of about nine thousand men under Colonel Dixon S. Miles of the regular army at Harper's Ferry and about twenty-five hundred under General White at Martinsburg. He naturally expected these commands to be withdrawn on his advance into Maryland, and finding that no movement had been made to retire them from their exposed and unsupported positions, determined on their capture and issued the following celebrated special order:

Special Orders No. 191.
HEADQUARTERS ARMY OF NORTHERN VIRGINIA,
September 9, 1862.

The Army will resume its march to-morrow, taking the Hagerstown road. General Jackson's command will form the advance, and, after passing Middletown, with such portions as he may select, take the route toward Sharpsburg, cross the Potomac at the most convenient point, and by Friday night take possession of the Baltimore and Ohio Railroad, and capture such of the enemy as may be at Martinsburg, and intercept such as may attempt to escape from Harper's Ferry.

General Longstreet's command will pursue the same road as far as Boonsboro, where it will halt with the reserve, supply, and baggage trains of the army.

General McLaws, with his own division and that of General R. H. Anderson, will follow General Longstreet; on reaching Middletown he will take the route to Harper's Ferry, and by Friday morning possess himself of Maryland Heights, and endeavor to capture the enemy at Harper's Ferry and vicinity.

General Walker, with his division, after accomplishing the object in which he is now engaged, will cross the Potomac at Cheek's Ford, ascend its right bank to Lovettsville, take possession of Loudon Heights, if practicable, by Friday morning, Key's Ford on his left and the road between the end of the mountain and the Potomac on his right. He will, as far as practicable, cooperate with General McLaws and General Jackson in intercepting the retreat of the enemy.

General D. H. Hill's division will form the rearguard of the army, pursuing the road taken by the main body. The reserve, artillery, ordnance, and supply trains, etc., will precede General Hill.

General Stuart will detach a squadron of cavalry to accompany the commands of Generals Longstreet, Jackson, and McLaws, and with the main body of the cavalry will cover the route of the army and bring up all stragglers that may have been left behind.

The commands of Generals Jackson, McLaws, and Walker, after accomplishing the objects for which they have been detached, will join the main body of the army at Boonsboro or Hagerstown.

Each regiment will habitually carry its axes in the regimental ordnance wagons, for use of the men at their encampments, to procure wood, etc.

BY COMMAND OF GENERAL R. E. LEE.
R. H. CHILTON,
Assistant Adjutant-General.
MAJOR-GENERAL D. H. HILL,
Commanding Division.

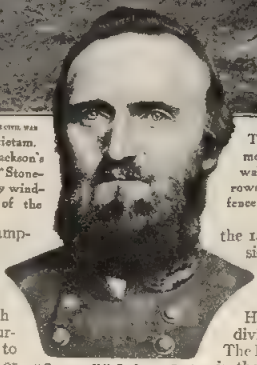
A copy of this order came into General McClellan's possession on the afternoon of the 13th of September. Seldom in the history of warfare has such a stroke of good fortune fallen to the lot of a commanding general—to have the complete plans of an enemy come into his possession in ample time to take full advantage of them. The Army of Northern Virginia had been completely separated, and had McClellan acted with promptitude it never could have been concentrated on the banks of the Antietam, as it should have been defeated in detail. Had McClellan pushed rapidly through Crampton's Gap he would have been directly on McLaws's rear and saved Harper's Ferry. Had he pushed his right through Turner's Gap he would have separated Longstreet from Hill on the one side and the troops across the Potomac on the other. The maximum distance that any of his columns would have had to move to accomplish the above was about twenty miles, and as Harper's Ferry did not surrender until the morning of the 15th, the period of time in which the march could have been made was thirty-eight hours.

THE BLUNDER BEFORE ANTIETAM

After getting possession of General Lee's order McClellan, instead of directing an

FROM PHOTOGRAPHIC HISTORY OF THE CIVIL WAR

Some of the first to fall at Antietam. The sun had scarcely risen before the dead dotted the fields where Jackson's men had met a charge by Hooker. The successive stands of "Stonewall's" veterans as they were driven back were marked by windrows of dead and dying. These are Confederates back of the fence on the Hagerstown pike



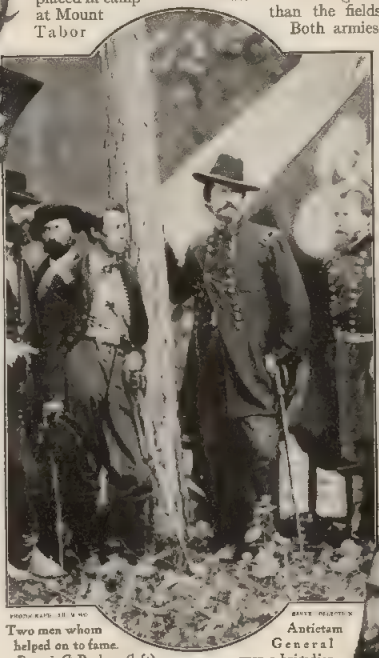
"Stonewall" Jackson, Lee's ablest lieutenant

immediate advance to Crampton's and Turner's gaps, ordered Franklin, who was then at Buckeystown, to move at daylight the following morning with Couch by Jefferson and Burkittsville upon the road to Rohrersville and to cut off or destroy McLaws's command. Hooker was directed to move at the same hour toward Middletown. Franklin arrived at Crampton's Gap, in the South Mountain, about noon of the 14th, and after a spirited action carried the gap and passed into Pleasant Valley. Lee, having heard on the 13th of McClellan's advance, directed General A. P. Hill to hold Turner's Gap, and ordered Longstreet, who had advanced to Hagerstown, back to support Hill. Cox's division of the Ninth Corps reached the crest at about 9 A.M. on the 14th and engaged Hill's division, the fight lasting all day, Cox being reenforced by the rest of the Ninth Corps and part of the First, while Hill was strengthened by two divisions of Longstreet's corps. The Federals carried the gap late in the afternoon, Longstreet and Hill falling back under cover of darkness and arriving at Sharpsburg on the morning of the 15th. Franklin, who had been joined by Couch on the night of the 14th, proceeded in a dilatory way down Pleasant Valley, and an hour after the surrender of Harper's Ferry was fully two miles from the enemy, who was drawn up between him and the force he was sent to relieve. He allowed McLaws's division to cross its trains to Harper's Ferry and withdraw without opposition. The center of the army came up in rear of the First and Ninth

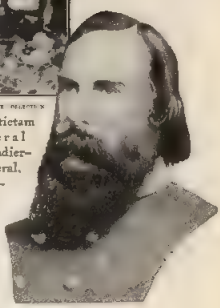
General Nelson A. Miles, who as a lieutenant-colonel led a charge against the Confederates entrenched in the "Bloody Lane"

corps after dark, Richardson's division of the Second Corps being placed in camp at Mount Tabor Church, while the rest of the corps, with the Fifth and Twelfth, went into camp around Bolivar, with Sykes's division and the artillery reserve at Middleboro. On the morning of the 15th the pickets discovered the retreat of the Confederates, and an advance of the First, Second, and Twelfth corps was ordered along the Boonsboro pike, and the Fifth and the Ninth to take the old Sharpsburg road to the left. Richardson's division moved rapidly through Boonsboro and Keedysville and found the Confederates occupying a strong position behind Antietam Creek. I remember with what joy the information was received among our troops as our division, being in advance, discovered the Confederate army in position on the high ground near Sharpsburg, facing the valley of the Antietam. Our army as it marched up was soon placed in position on parallel lines facing the enemy and three or four miles distant.

No better country could have been found for maneuvering or fighting armies than the fields of Maryland. Both armies were placed in battle formation along the ridges overlooking the valley of the Antietam, long lines of battle with strong skirmish lines well in advance, every commanding crest crowned with batteries of artillery, with heavy reserves and cavalry in the rear. Seldom have two armies ever taken positions more grand and picturesque. Almost constant picket firing was kept up between the skirmish lines, and the batteries were at times engaged in sharp artillery duels, doing



Two men whom Antietam helped on to fame. General Francis C. Barlow (left) won a brigadiership, and Winfield S. Hancock, already a general, and known as "the superb," succeeded General Richardson in command of a division



General James Longstreet, one of the Confederacy's greatest fighters, who commanded a corps at Antietam

The charge across Burnside's Bridge Charge after charge had failed to win this bridge for the Federals under General Burnside. When it was finally carried it was too late to affect the battle, which was practically over

General Ambrose E. Burnside, who refused the command of the army and served under McClellan at Antietam He soon succeeded McClellan in command of the Army of the Potomac, only to meet a disastrous defeat at Fredericksburg

little damage, as the bulk of the troops soon took advantage of the adjacent crests to shield them from the artillery fire. One shot, however, I considered most unfortunate. I had at the time the first and finest charger I have ever owned, a beautiful Kentucky thoroughbred known as Excelsior. He had been my companion on many hard campaigns. He was so severely wounded by a twelve-pound shrapnel shell that he had to be shot at once. It was like losing one's best friend. Scenes of joy and sadness followed each other in rapid succession. An incident that illustrated the gallantry and chivalry of the two contending armies of Americans occurred at this time, September 16th. The young officers, full of life and energy, when not actually engaged, and when relieved from care and responsibility, frequently challenged each other to manly athletic sports and feats of horsemanship. While the two armies were in order of battle awaiting developments, two young officers of General Meagher's staff, Surgeon Reynolds and Captain Gosson, challenged each other for a cross-country ride; jumping their horses over the fences and ditches, they passed from field to field down through the lines of battle and finally out through the skirmish line regardless of the orders to halt. Nearing the enemy's line and within easy range of their rifles, they turned to the left and raced between the lines of the two armies, as the commands to halt were soon changed to cheers of wild excitement. The Southern troops, true to their spirit of chivalry, caught the enthusiasm and with a wild yell threw their hats in the air and gave every demonstration of their hearty approval. Finally the gallant riders turned and galloped within our own lines.

When the news of the surrender of Harper's Ferry reached McClellan on that morning he must have known that Jackson and Turner were in Virginia and McLaws at Maryland Heights, at least eighteen miles from Sharpsburg, and that Lee had only Longstreet's and Hood's and D. H. Hill's divisions with him. Franklin should have been counted on at least to hold McLaws in

check. McClellan had four full corps with which to crush Lee before he could have been reenforced, and had he pushed his advance energetically and attacked vigorously the force with Lee should have been crushed by the night of the 15th, or at the latest on the following morning, before Lee's lieutenants had rejoined him. Jackson arrived at Sharpsburg on the morning of the 16th and rejoined Lee's left early on the 17th. McLaws arrived that morning, while A. P. Hill did not reach the field until about 2.30 in the afternoon, but in timely season to assist in repelling Burnside's assault.

THE ANTIETAM BATTLEFIELD

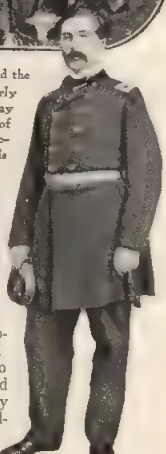
Standing on a high point of the ridge just south of the Rohrersville road and just outside of the village of Sharpsburg, a view of almost the entire battlefield is to be had. Looking east, in the far distance on the right are the spurs of Maryland Heights, and in the background, running to the north, is the stately range of South Mountain. About a mile away to the southwest are some low hills, at the base of which is the Burnside bridge. Antietam Creek cannot be seen, but its course can readily be detected by the trees which fringe its banks. To the northeast, about two miles away, is a large brick building, the Pry house, around which were pitched the tents of McClellan's headquarters. Looking due north, the Dunker church, a mile away, is to be seen on the right edge of a clump of woods known as the West Woods, while on the right of the Hagerstown pike is a cleared space of about three-eighths of a mile, to the right of which are the East Woods. About a mile north of the Dunker church the Hagerstown pike runs through another clump of woods known as the North Woods. The road to Smoketown starts from in front of the Dunker church and runs to the northeast, while about half a mile south of the church a sunken road leaves the pike and curves to the southwest, entering the Rohrersville road about five-eighths of a mile from the outskirts of Sharpsburg. This road is known as Bloody Lane, and with the above-mentioned woods was the scene of the most desperate fighting and severest loss of life.

McClellan's army, with the exception of Franklin's corps and Couch's division, which was in Pleasant Valley and did not reach the field until noon of the following day, was bivouacked along the Boonsboro road, Hooker's and Mansfield's corps forming the right, Sumner at the center, and Burnside at the left, with Porter in reserve opposite the middle bridge. McClellan's plan of battle was to engage the Confederate left with Hooker's and Mansfield's corps, supporting this movement by Sumner's and, if necessary, by Franklin's corps, and after having crushed the left to engage the right, then advance his center with all available forces. The orders he issued during the battle did not lead to a simultaneous attack along the line, but resulted in a series of separate engagements and enabled General Lee at the cessation of fighting at one part of the line to move his unengaged forces to the next point of attack. First Hooker's corps and then Mansfield's attacked the left, meeting with serious resistance. Sumner advanced to their assistance, Sedgwick's division being almost annihilated, but Richardson and French forcing and maintaining a position at the Dunker church and capturing the Bloody Lane. Finally Burnside attacked Lee's extreme right and was repulsed by A. P. Hill.

FIRST BLOOD ON THE SIXTEENTH

About 2 P.M. on the 16th, McClellan directed Hooker to cross by the upper bridge and engage the left of the Confederate line. The crossing was effected by 4 P.M., and swinging around to the south his three divisions, Hooker went into action against Jackson's corps and Hood's division. In this attack Hooker was assisted by a number of batteries which had been located on the high ground south of McClellan's headquarters, this position enfilading part of Jackson's line. No decisive results were obtained from this action, although the advantage was slightly in favor of the Union forces. At nightfall the pickets of the opposing forces were very close together, and at about three o'clock on the morning of the 17th an impetuous advance was made by Meade's division in the center, Doubleday's on the right, and Ricketts's on the left, the advance being supported by the fire from the long-range batteries near McClellan's headquarters. The result was the gradual withdrawal of the Confederates to the West Woods, where a terrible struggle ensued. Jackson's corps having been reenforced by D. H. Hill and four brigades of McLaws's division, which had just arrived on the field, caused a slow withdrawal of Hooker's corps, he having been severely

The sunken road at Antietam, since that day called the "Bloody Lane." The fighting here lasted for nearly four hours and ended only when the last few Gray survivors had been captured.—General A. P. Hill, of Jackson's corps, who prevented a decisive Federal victory at Antietam. Later, at Chancellorsville, his troops fired the volley that killed Jackson



FROM MEAGHER COLLECTION

General T. F. Meagher, whose men filled the Bloody Lane with Confederate dead

wounded. The Twelfth Corps under Mansfield had crossed the Antietam by the upper bridge on the night of the 16th, bivouacking about a mile and a half in the rear of Hooker's position, and early on the morning of the 17th moved forward to support Hooker. As the first division of this corps advanced, it found Hooker's men slowly retreating from the cornfield which lay between the pike and the East Woods. After two hours of hard fighting the first division was established about one-half mile north of the Dunker church and the second division in the woods about the church.

On the night of September 16th I had been ordered to take six companies of my regiment and one company of cavalry and move under cover of darkness and ascertain, if possible, if the stone bridge on the Sharpsburg road over the Antietam was occupied. Groping our way along, we reconnoitered the position, and after much difficulty succeeded in reaching the bridge and found it still unoccupied. Placing my troops in position to hold it, I reported the fact to headquarters, and waited until the early dawn, when I advanced a small force up the road toward Sharpsburg and discovered the enemy's line of

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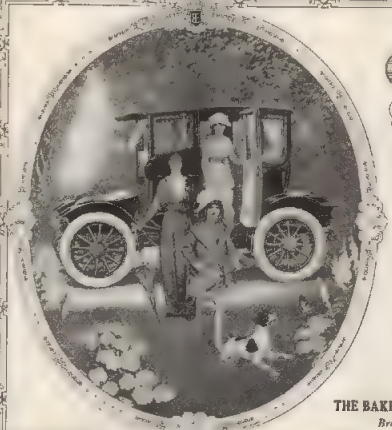

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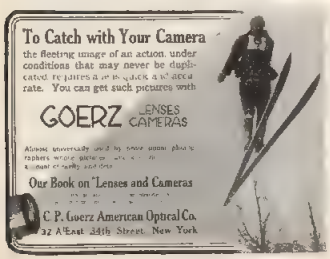
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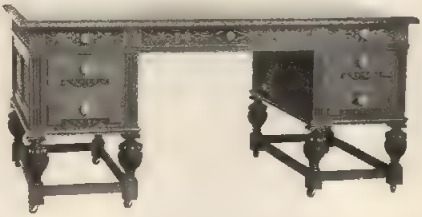
Robert Cavelier, Sieur de La Salle was always on the march towards the Golden West before 7 A. M.—And out at La Salle, the *Westclox* people design sleepmeters for men who, like La Salle, will get under way while the East is still gray.

Big Ben is an admirable example of these clockmakers' skill.—Slender, handsome, yet massive, he stands 7 inches tall with clean-cut, well shaped hands and a frank, friendly face, distinctly visible in the dim morning light.

He rings just when you want and either way you want, 5 straight minutes, or every other half minute during 10 minutes unless you flag him off.—His keys are large, strong, pleasing to wind—his voice deep, cheerful, pleasing to hear.

Big Ben is sold by 18,000 jewelers. His price is $2.50 anywhere in the States, $3.00 anywhere in Canada. If you can't find him at your jeweler's, a money order sent to *Westclox, La Salle, Illinois*, will bring him to you attractively boxed and express charges paid.



THE Flemish renaissance in furniture designing and making developed a sheer beauty and a charm of line and treatment which is faithfully retained in Berkey & Gay pieces studied from that period.

Berkey & Gay furniture has been aptly termed the "American renaissance." It marks the turning from the crude, cheap, garish modes to the best thought not only of the past centuries but of today. In furniture it brings to you the beauty that endures and the quality that satisfies. When you purchase Berkey & Gay furniture you are not buying for temporary use, but

For Your Children's Heirlooms

OUR furniture is the standard of comparison. Our shopmark is as full of meaning on a piece of furniture as the word "sterling" on pure silver.

Our period pieces are wonderful studies from the best work of the master designers of the old days.

Our dealers, with the displays on their floors and our wonderful portfolio of direct photogravures, are able to give you the privilege of choice from our entire line.

YOU will enjoy reading our de luxe book, "Character in Furniture," the demand for which has been so great that we have prepared a second large edition. It is a treatise on worthy furniture and its uses. We will mail it to you at once for fifteen two-cent stamps. With it we will send "The Story of Berkey & Gay"—an inspiring book for boys, if you have any.

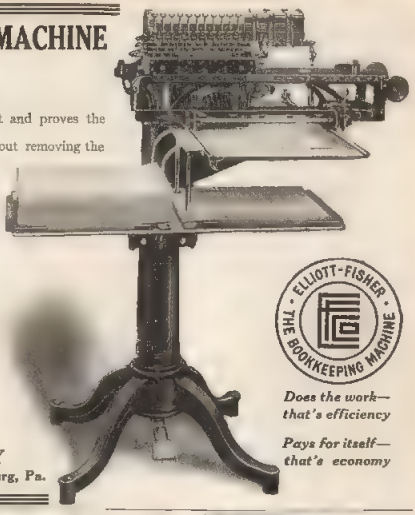
BERKEY & GAY FURNITURE

This inlaid mark of honor identifies to you each Berkey & Gay piece.

Berkey & Gay Furniture Co.
161 Monroe Ave., Grand Rapids, Michigan

THE BOOKKEEPING MACHINE

Will do your bookkeeping.
Will give you the results you want.
Makes all entries in plain machine type.
Does all the adding as it goes along
Checks the work of the human element and proves the accuracy of every entry.
Posts the standard loose leaf ledger without removing the pages from the binder, or makes entries on card records with equal facility.
Makes monthly statement or bill while posting to either loose leaf or card ledger, if desired.
Provides a separate proof sheet of all entries for auditing or other purposes, if wanted.
Does the work twice as fast as it can be done the old-fashioned way—by hand.
Eliminates all the worry and bother.
No hunting for mistakes at the end of the month. Proven (trial) balance always waiting to be taken off whenever wanted.
Send your name and address for full particulars of Bookkeeping by Machinery and copy of that new and interesting illustrated magazine, "Bookkeeping To-day"



Does the work—that's efficiency

Pays for itself—that's economy

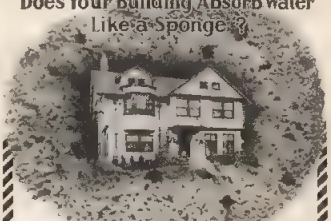
ELLIOTT-FISHER COMPANY
1018 Cedar Street Harrisburg, Pa.

VOSE
PLAYER PIANO

The musical tone and the unexcelled construction of the Vose Player Piano, with its latest control methods, enable you to play your favorite selections with true musical expression. We deliver, when requested, direct from our factory, free of charge, and guarantee perfect satisfaction.
Liberal allowance for old pianos.
Time payments accepted.
FREE—If you are interested in pianos or player pianos, let us send you our beautifully illustrated catalog, that gives full information.

VOSE & SONS PIANO CO.
156 Boylston St. Boston, Mass.

Does Your Building Absorb Water Like a Sponge?



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With Stone-Tex, the Liquid Cement Coating for Stucco, Concrete, Brick and Masonry.

TRUS-CON STONE TEX
APPLIED WITH A BRUSH

Beautifies disfigured walls. Gives uniform, even color. Fills hair cracks, becomes part of wall. Absolutely dampproof. Weather resisting. An artistic flat finish hard as flint. Variety of colors.

FREE Color Card with valuable suggestions and data on request. For its artistic value, use Stone-Tex. For a paying investment, use Stone-Tex.

If you are interested in waterproofing, fireproofing, damp-proofing, etc., for Concrete write us.

KAHN Building Products — TRUSSED CONCRETE STEEL CO

TRUSSED CONCRETE STEEL CO.
114 Trussed Concrete Bldg.
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Waterproofings, Dampproofings, Technical Paints.

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PROVIDENCE, RHODE ISLAND.

BAIRD-NORTH CO. MANUFACTURE AND SELL DIRECT TO THE USER.
I WILL SEND FOR THEIR BIG 200-PAGE FREE CATALOG.

BECAUSE a dollar saved is a dollar earned. Buying direct from their workshop I pay factory prices—one-third less than retail.

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BECAUSE, just for the asking, I will receive their beautiful 200-page book, picturing over 10,000 splendid articles suitable for Christmas and other gifts.

BECAUSE I shall receive prompt service and big value. They will satisfy me or return my money—nobody can do more

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I will write for their Free Catalog today. It's a big 200 page book with pictures of Diamonds, Gold and Silver Jewelry, Watches, Rings, Toilet and Leather Goods, Tableware and Novelties.

Just write your name and address below, cut the coupon and mail now. You will get our catalog by return mail. BAIRD-NORTH CO., 722 Broad St., Prov., R.I.

Name .....
Street .....
City .....
State .....

"Here's what keeps us well and happy!"

WHEN the Campbell kids say this they are also speaking for a great multitude of other healthy happy youngsters everywhere, whose energy and good spirits are promoted by

Campbell's TOMATO SOUP

So tempting, so nourishing, so easy to prepare and so handy to serve, this wholesome soup invigorates the appetite and the digestion; and does a large part in the regular building-up of strong bodies and cheerful minds.

It is equally satisfying to young and old. The happy Campbell Kid Family includes all ages of people who know what is good. Are *you* one of them? If not, you'd better join *today*.

Caroline Cutter
Is all in a flutter
With *Campbell Soup* visions
Too joyful to utter.

21 kinds 10c a can

Asparagus	Clam Chowder	Pea
Beef	Consommé	Pepper Pot
Bouillon	Julienne	Printanier
Celery	Mock Turtle	Tomato
Chicken	Mulligatawny	Tomato-Okra
Chicken Gumbo (Okra)	Mutton Broth	Vegetable
Clam Bouillon	Ox Tail	Vermicelli-Tomato

Look for the red-and-white label

THE SOHMER CECILIAN THE FARRAND CECILIAN

THE CECILIAN PIANOS

THAT ANY ONE CAN PLAY

A Cecilian Night's Entertainment

¶ How the hearts of children absorb music! At evening, when the myriad tasks and cares of day are laid aside, when there is leisure to listen, to think, to rest, to build dreams gather the children about you and give the hour to Music.

¶ You can fill their expectant natures with the tenderest, the sweetest, the most ennobling things of Music, by playing for them the *Cecilian Piano*. You are Schumann, you are Beethoven, Mendelssohn, MacDowell or Mozkowski, at will, and yet, being all these, you are still *yourself*, and by producing with the many special devices of the *Cecilian Piano* the exquisite shadings of its tone, you can interweave your own mood with the original melody. Who can say how much kindness and nobility of character may not be born of these Cecilian Nights' Entertainments? Their influences are formative and refining beyond belief.

¶ *Anyone* can play the *Cecilian Piano*. It pedals without fatigue; its mechanism is responsive to the lightest touch; its action in every part is intimate and self-revealing as your own shadow. All air chambers, valves and connections of the *Cecilian* are steel, brass or phosphor bronze, instead of wood, obviating the many difficulties caused by climatic changes All the perfection in detail, the elegance of line and finish, the ensemble of small refinements which give to a piano *personality*—make the *Farrand Cecilian* the piano par excellence for *your* home Let us send you our literature, and demonstrate to you the superiority of these instruments. We will advise you of nearest dealer, or sell you direct if the *Cecilian* is not on sale convenient to you. Address Dept. G.

THE FARRAND COMPANY, Dept. G, DETROIT, MICH.

Correspondence invited from dealers in unoccupied territory.

TRADE MARK

Heat Expense Cut ½ to ⅔ by the UNDERFEED

Write for FREE BOOK

Prepare For Your Winter Heating NOW

WHY burn money in excessive coal cost? The Underfeed will cut your coal bill ½ to ⅔ **every winter.**

In the coal bin
the Underfeed effects its first saving, for it perfectly burns cheaper grades of hard and soft coal—coal which would smother fire in other heaters—thus saving $2 to $3 on every ton.

Smoke and gases
which represents a waste of 25% to 40% in topfeed heaters, pass up through the fire in the Underfeed and are consumed. Result—more heat, clean heat, as well as cheap heat—no smoke, no clinkers and but few ashes.

In the Underfeed
coal is fed from below; fire is on top and sides in direct contact with the most effective radiating surfaces. In ordinary or topfeed heaters, fire is on the grates—far removed from the heating surfaces.

Cut-Out View Underfeed Furnace

DON'T waste good money patching up your unsatisfactory heater or installing an inferior one. Get an Underfeed; it will soon pay for itself and then save you money the ***rest of your life.***

Thousands of Underfeed users, representing every state in the Union and every province in Canada, KNOW from personal experience that the Underfeed DOES yield CLEAN, EVEN heat at a saving of ½ to ⅔ the usual cost.

THE PECK Williamson Underfeed FURNACES BOILERS

Underfeed testimonials are revelations of proved heat economy and efficiency. Here's an example:

T. A. Mauzey, Juneau, Alaska, writes: "The Underfeed I installed certainly is everything that could be desired in a heating apparatus. With two scuttles of coal, two or three rooms can be kept comfortably warm for 24 hours without any more trouble than making the fire; and with four buckets of coal the whole house is kept warm and comfortable for 24 hours in the coldest weather we have in Juneau."

The Underfeed book clearly describes the simple construction of the Underfeed and its rational method of coal burning. Fill out coupon below for FREE furnace or boiler book.

Free Heating Plans and Estimates Prepared for You by our Engineering Department. Write TODAY.

THE PECK-WILLIAMSON CO. 310 W. Fifth Ave. Cincinnati, O.

THE PECK-WILLIAMSON CO., 310 W. Fifth Ave., Cincinnati, Ohio.

I would like to know *more* about how to cut down the cost of my Coal from one-half to two-thirds. Send me—FREE—

UNDERFEED Furnace Booklet.....
Boiler Booklet.....
(Indicate by X Booklet you desire)

Name _____ *Street* _____

Postoffice _____ *State* _____

_____ Name of dealer with whom you prefer to deal.

Chalmers

"Six" 2, 4 or 5 Passenger $2400
"Six" 7 Passenger $2600
"Thirty-Six" $1950
"30" $1600

"Thirty-Six" $1950

15 Notable Chalmers Features

Electric Lights, Turkish Cushions, Nickel Trimmings
Increased Wheel Base — *Eleven-inch Upholstery*
Improved Springs — *New Flush-sided Bodies*
Chalmers Self-Starter — *Demountable Rims*
Long Stroke Motor — *Big Wheels and Tires*
Carburetor Dash Adjustment — *Dual Ignition System*
Four-Forward Speed Transmission — *Speedometer*

WE announce for 1913 big improvements in Chalmers cars in *comfort, convenience* and *appearance*. For it is along these lines that we believe the greatest advances in automobile building are to be made.

Few changes have been made in our chasses. The mechanical features of our cars have been right from the beginning. Satisfactory service in the hands of 27,000 owners proves this.

Here, then, are the principal additions and improvements on Chalmers 1913 cars:

Easier Riding Qualities

Luxurious comfort in every detail: Turkish cushions 11 inches thick, upholstery of the overstuffed type, wide seats filled with high-grade hair and covered with heavy, soft, pebble-grained leather.

The long wheel base, big wheels and tires, and long elastic springs make all roads smooth.

More Conveniences for Operator

Electric lighting is regular equipment for 1913 on the "Thirty-Six" and the "Six." Just touch a switch on the dash and you can light at will head, tail and side lights.

And no more cranking. A season's use has proved the Chalmers air pressure starter the simplest and most efficient starting device ever designed.

Chalmers 1913 Models

	"Six"	"Thirty-Six"
Touring Car, 5-passenger	$2400	$1950
Touring Car, 7-passenger	2600	2150
Torpedo, 4-passenger	2400	1950
Roadster, 2-passenger	2400	1950
Limousine, 7-passenger	3700	3250
Coupe, 4-passenger	2700	2250

Prices include full equipment

Conveniently located on the new style Chalmers dash are all controls and indicators. Everything you need for running the car is within easy reach.

Added Beauty

Chalmers cars have always been known for their "looks." For 1913, flush-sided bodies; dash of one-piece with body; handsome nickel trimmings, leather lining throughout the body and on dash, make them even more beautiful than in the past.

Three Great Cars

Chalmers cars for 1913 are made in three chassis sizes and fourteen body types. The "Six" is now offered at the unprecedented price of $2400; the "Thirty-Six," which made 1912 a self-starter year, at $1950; the famous "30" at $1600. All cars are fully equipped with top, windshield and self-starter.

Let us send you our book on the making of Chalmers cars and our new catalogue. Just fill out and mail the attached coupon.

Please send "Story of The Chalmers Car" and catalogue of 1913 cars

Name .....
Street .....
City ..... State .....

Chalmers Motor Company, Detroit

When you write, please mention the Cosmopolitan

"CRAFTSMAN" HOUSE PLANS

THIS is a *CRAFTSMAN house;*—durable, beautiful, and convenient;—with no useless partitions, no waste space, no over-decoration.

We design homes of this character without charge *for CRAFTSMAN subscribers*

Send 6c for new "24 CRAFTSMAN HOUSES" and study our houses. We will also send a copy of THE CRAFTSMAN Magazine, which treats in a new and inspiring way of building, furnishing, and beautifying homes; also sample pages of our new, 204-page book, "MORE CRAFTSMAN HOMES." Address

THE CRAFTSMAN, Ben Wiles, *Circulation Manager*
***Room 419.* 41 West 34th Street, New York City, N. Y.**

Makes A Phonograph Sound Life Like

The Morse Clarifier a remarkable attachment device by means of which any make of machine. It renders the sound loud, clear, lifelike and eliminates that unpleasant metallic effect.

Scientific construction prevents sound warping.

It delights and satisfies. Easily inserted and operated. $1.00 Value Prepaid. Send dollar to-day. Mention phonograph, purchase or get it on Guaranteed absolutely satisfactory or money refunded. References any bank in Minneapolis.

State whether for Victor, Victor-Victrola, Edison with rocker or mandrel connection. Columbia, Graphophone, Lyric or Cylinder. Information matter free. Store fixtures waived.

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457 N. W. Nat. Bk. Bldg., Minneapolis, Minn., U. S. A.

AGENTS $50 to $100 EVERY WEEK

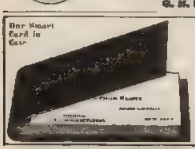
If you're a hustler I'll gladly pay more. The slickest money-making proposition in the country for wide-awake agents. Carpenter selling 200 every week; Briley sold 3,200 and still going. Only scientific automatic razor sharpener made, gives Barber's diagonal stroke, hones and strops all standard Razors and Safety Blades. Guaranteed for Life. Sells on sight. $2.00 complete. 100 to 150% profit. Exclusive territory. Write today—now to get FREE finest and largest outfit. Secretary, **The Victor Co., 744 Victor Bldg., Canton, O.**

Brainy Diet

Wrong foods cause various diseases. The stimulative, solvent, laxative and vital foods in ordinary use will cure you when proportioned to your needs. See booklets. No foods sold. A digestible brainy diet nurses brain power, good memory and progressiveness even in advanced age. Investigate. Send addresses of those interested. Send ten cents for these instructive booklets— (1) The New Brainy Diet System; (2) Diet vs. Drugs; (3) Effects of Foods; (4) Key to Longevity.

G. H. BRENKLER, Food Expert, Dept. 14 K Washington, D. C.

Tomatoes and Lemons are Solvents; Green Vegetables are Laxative, etc.



A Card of Character

A card is worth like a man after all. The more character the more power he has. The more character in your card, the more power it has.

THE PEERLESS PATENT BOOK FORM CARD

has more character than any card you have ever heard of before! It can be beautifully engraved, or it can be neatly printed, as the user desires. It is not costly, always rain, because it is not a single book form with tissue paper strung each card, and the book form also prevents from becoming worn, bent or creased. It rises as it always right there when you need it. Can you think of more desirable for a card? Write and get a sample tab of the cards, detach them, a flap as you do so, the clean smooth edge at place of detachment, and the protection from dust and dirt. They have absolute, to convince you, if you will but see them.

THE JOHN B. WIGGINS CO., Engravers, Die Embossers, Plate Printers
Established 1877 **63-65 EAST ADAMS ST., CHICAGO**

Make your furniture, woodwork and hardwood floors look just like new—simply dust with

LIQUID VENEER

WRITE TODAY FOR FREE TRIAL BOTTLE

BUFFALO SPECIALTY COMPANY,
245-J Liquid Veneer Building, Buffalo, N. Y.

When you write, please mention the Cosmopolitan

138B

Here is Real Cigarette Distinction for You

THE little personal touch that makes you stand apart from the rest. Combines distinction, character, charm.

100 Cigarettes with Your Monogram for $2

ARTISTICALLY engraved in gold initial on each cigarette. 100 fragrant smokes of smooth, mild, selected, rich Turkish tobacco, rolled to suit your especial fancy. Tips of gold, silver, cork, straw or plain. Enclose $2 and state your monogram, select style by number and see how pleased you will be with them. Or, send 50c in stamps for 5 sample cigarettes. Write today. This offer limited.

APOLLO BROS., Inc. 145 North 8th Street Philadelphia, Pa.

Cadillac Desk-Table

No. 352—One of seventy-five designs
Covered by four patents

A *real* desk and a *handsome* library table—combined in the space of one; and at the price of one.

Simply pulling open the drawer provides desk space with non-spillable ink-well and pen groove, with a large roomy drawer beneath the lid for stationery and correspondence. To use desk, nothing on the table need be disturbed.

Your choice of seventy-five designs (in all staple woods) at prices to suit.

Cadillac Desk-Tables—**The Table with the Metal Slides** are carried by leading furniture dealers. If yours cannot supply you, send for catalog No. M, illustrating our full line.

No. 1

Hang Your Pictures
(weighing up to 100 lbs.) with Moore Push devices. Their tool-tempered steel points will not disfigure plaster walls.

Moore Push-Pins

glass heads, steel points. Try them for calendars, small pictures, etc. Push them in, no hammering. Nos. 1 and 2, ¼ doz. 10c.

Moore Push-Less Hangers (brass hooks, steel points inclined downward) will support hall-racks, mirrors, etc. No moulding required, no picture wire need show. Easily put up. No. 25 (holds 50 lbs.), 5c doz. 20c., No. 28 (holds 100 lbs.), ¼ doz. 20c.

Moore Push Thumbtacks needle-like points firmly embedded in flat brass heads; useful everywhere. Three sizes: Nos. 32, 39 and 33, 2 doz. 10c. At stationery, hardware, photo stores or by mail. Send for sample box 36.

No. 25

Moore Push-Pin Company, 1157 Sansom St., Philadelphia, Pa.

RANGER BICYCLES

Have imported roller chains, sprockets and pedals, New Departure Coaster-Brakes and Hubs; Puncture Proof Tires, Anderson equipment and many advanced features to exceed any bicycle wheels. Guaranteed 5 yrs.

FACTORY PRICES to rider direct to you are less than others ask for cheap wheels. Prices range from $12 up. A few second hand wheels $3 to $8.

10 DAYS' FREE TRIAL Weship on approval, freight prepaid, anywhere in U.S., without a cent in advance. DO NOT BUY a bicycle or a pair of tires from anyone at any price until you get our big new catalog and our special offer and marvelous new offer. A postal brings everything. Write it now. TIRES, Coaster-Brake Rear Wheels, lamps, parts, sundries at half usual prices. Rider Agents everywhere are making money selling our bicycles, tires and sundries. Write today.

MEAD CYCLE CO., Dept. N-33, CHICAGO

THIS JOB PAYS $25-$50 Weekly

You Can Be an Auto Expert

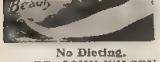
We teach you the entire subject by mail in 10 weeks' spare time, and assist you to secure good position. Demand for trained men can't be filled. Simple, practical and personal instruction. Free auto model to each student.

FIRST LESSON FREE—WRITE FOR IT NOW

Send postal at once to The Original Auto School

EMPIRE AUTO INSTITUTE, 163 Empire Bldg., Rochester, N. Y.

OWNLAS We Supply Competent Men



"I can take a pound a day of a patient, or not at all. Other systems may temporarily alleviate, but this is sure and permanent." — N. Y. Medical Age. Write for lecture "Great Subject of Fat."

No Dieting. No Hard Work.

DR. JOHN WILSON GIBBS' TREATMENT

For the Permanent Reduction of Obesity.

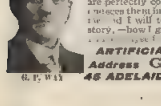
Harmless and positive. NO FAILURE. Your reduction is assured—reduce to stay. Good means a strong moment. $5.00. Mail, or office, 1270 Broadway, New York. A PERMANENT REDUCTION GUARANTEED.

"I believe it is positive and is frank and honest."—*N. Y. Herald* July 9, 1893.

"Dr. Gibbs, Dr. Gibbs is the recognized authority."—*N. Y. World.*

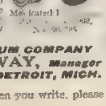
NAME IN AUTO ROBE

I Was Deaf 25 Years



I CAN NOW HEAR

with these soft, pliable artificial ear drums. I wear them day and night and they are perfectly comfortable. No one sees them in my ears. Write me and I will tell you a true story,—how I got deaf and how I regained my hearing.



Mr. Leonard

ARTIFICIAL EAR DRUM COMPANY

Address GEO. P. WAY, Manager

46 ADELAIDE ST., DETROIT, MICH.

G. P. WAY

Unequaled for Pastry.

CRISCO

For Frying For Shortening For Cake Making

because of its pure vegetable origin, makes your pies and puddings so perfectly digestible that no member of your family need deny himself the pleasure of eating them.

It makes the crust deliciously tender, light and flaky—so much so that even the under crust which so easily becomes tough and hard is crisp and easy to cut.

It gives a flavor as delicious as butter—yet at half the cost—for, in addition to all its other advantages, the price of Crisco is but half that of butter and materially less than that of pure lard.

Crisco can be used instead of butter or lard throughout all your cooking. As it is so much richer, one-fifth less of Crisco than of other shortenings is required. When used instead of butter, add salt in the proportion of one level teaspoonful to the cupful of Crisco.

Try this recipe for pie crust. It is excellent.

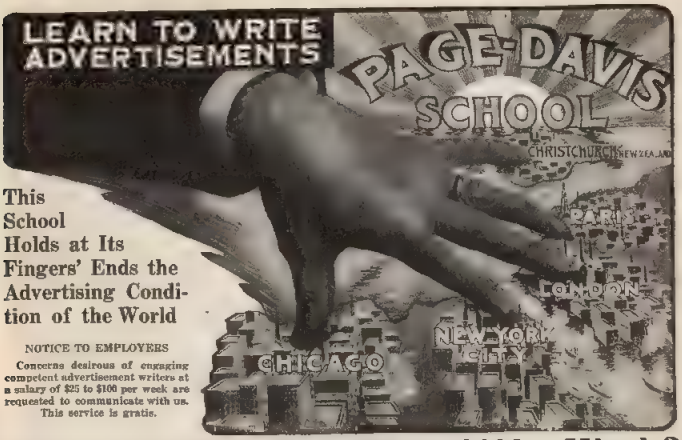
1 cupful flour
5 tablespoonfuls Crisco
½ teaspoonful salt
2 tablespoonfuls ice water
(Use level measurements)

Sift flour and salt together. Chop in Crisco very fine and add water slowly. Handle lightly. Put the dough on a board, roll three eighths inch thick, line pan and bake in a hot oven. Have all ingredients cold except Crisco, which should be warmed, if necessary, but not melted.

Send for Our Cook Book

It tells why Crisco makes better foods at less cost and gives over 100 tested recipes illustrating the best ways to use Crisco.

The Procter & Gamble Co.,
Dept. U,
Cincinnati, O.



This School Holds at Its Fingers' Ends the Advertising Condition of the World

NOTICE TO EMPLOYERS

Concerns desirous of engaging competent advertisement writers at a salary of $25 to $100 per week are requested to communicate with us. This service is gratis.

Do You Want to Earn $25 to $100 a Week?

If you learn to write advertisements, you will be preparing yourself against that uncertainty that creeps into your present position. Every man who studies advertising with the Page-Davis School has a better hold on his business future and a thorough knowledge in the most profitable profession in the world of learning the advertising business which pays from $25 to $100 a week.

The illustration given above shows how this school is in touch with the business men of the world, with a home office in all the large cities of the world. It illustrates the gigantic organization of the Page-Davis School reaching out in the large cities to help students attain their success.

This is why every Page-Davis student is glad to say "I am a Page-Davis Man."

PAGE-DAVIS SCHOOL,
Chicago.

Gentlemen: You may be interested to know that I have been engaged in selling advertising service for several weeks. I work on a commission basis and make as high as $135.00 a week, paying my own expenses.

I would never have been able to handle this proposition with at the help I have received from following your course. Thanking you for all past favors and wishing you your continued success, I remain

Very respectfully yours,
E. F. WHITSON

Whenever a business man wants an advertising man he thinks of the Page-Davis School, because it is a household word in every business concern and the first thing that comes to a business man's mind is "I want a Page-Davis man."

There is no wonder about it—if you will only look into the matter thoroughly, you will find that the Original Advertising School of the world is the school which is recommended by all business men and publishers who know what real instruction constitutes.

We want men and women who have sufficient common-sense to know what real instruction is, because a man who doesn't know is not a very likely candidate for a position when it is offered him. This school also offers to the man who has found out he made a mistake, a course of instruction that will qualify him for his chosen profession.

The whole structure of the business world to-day is built upon a foundation of advertising, and every worker, from office man to magnate, must understand the principles of this business ground-work, if he is to attain the success possible to him.

When a man is contemplating the study of advertisement-writing, he is standing on the threshold of his future, and at such a time he should weigh the problem carefully. A mistake at this critical moment means failure. If he takes the Page-Davis course, he eliminates the possibility of incompetency, which is but another word for failure.

At the head of the advertising business is a method of making advertising pay. The principles are set forth in our new and beautiful prospectus, which you will find interesting literature, and which **will be sent to you FREE, together with a late list of employed students earning up to $100 a week.**

CUT OFF AND MAIL COUPON TODAY

PAGE-DAVIS SCHOOL:

Send me literature giving sample advertisement and terms. I am interested in advertising as a profession.

Name .....
Street .....
City ..... State .....

PAGE-DAVIS SCHOOL

"THE SCHOOL THAT GRADUATES EXPERTS"

Address Either Office **102 Page Building CHICAGO, ILL.**
102 150 Nassau Street NEW YORK CITY

Everywhere

Electric light for all the world—in city, village and country, on land and sea—this is Edison's dream come true.

Electric light for *everybody* is made possible by the long-lasting economy of the

Edison Mazda Lamp

Ten cents today buys as much electric light as a dollar did twenty-five years ago.

Inventors, manufacturers and lighting companies have continuously improved, not only the lamps that give the light, but also the service that makes electric light universal.

Why it is Cheaper

All this progress, crowned with the Edison Mazda Lamp itself, brings electric light within the reach of every business and every home.

This new lamp is twice as economical as the best electric lamps previously in common use.

Join the millions using these lamps, that give so much light for so little money. No store or home is too small to have electric light.

And electric wiring is now so simplified that you can install electricity at surprisingly low cost and with little disturbance.

New Lamps in Old Fixtures

If you are still using old style electric lamps, put Edison Mazdas in the same sockets—and compare results.

Ask any lighting company or electrical dealer about modern house-wiring and the best styles and sizes of Edison Mazda Lamps for your special needs. Do this today.

This Only Rival

This Symbol on all Edison Mazda packages

General Electric Company

Largest Electrical Manufacturer in the World

Sales Offices in all large cities — Lamp Agencies Everywhere.

The Guarantee of Excellence on Goods Electrical

3764

"Convenient—Shaves clean."
William Collier

"Complete Satisfaction"
Eddie Foy.

'Ever-Ready'
Safety Razor

With 12 Blades

$1

"It's a marvel"
Joe Weber

Quickness, safety, comfort and the best shaver at any price. The biggest men on the stage have found these qualities to their complete satisfaction in the *Ever-Ready*. They recommend this dollar outfit with 12 blades to all the profession and all men.

Your Druggist Hardware or General Store sells the *Ever-Ready* and *extra Ever-Ready blades 10 for 50c.*

AMERICAN SAFETY RAZOR CO., Inc., Herald Square, New York

"Glad to recommend it"
Lew Fields.

"Have You a Little 'Fairy' in Your Home?"

THERE are twenty-five delightfully refreshing baths in a **five-cent** cake of Fairy Soap. ¶ The quality of

Fairy Soap

5c

could not be improved if we charged double the price; we would merely add expensive perfumes, which do not improve the quality. ¶ The shape of Fairy Soap is oval, and fits the hand. Fairy Soap always floats within easy reach. ¶ Buy Fairy Soap, try it in the bath, and you'll never be without it again.

THE N. K. FAIRBANK COMPANY
CHICAGO

First Printing One Half Million Copies

¶ The best work—by far—yet done by the author of That Printer of Udell's, The Shepherd of the Hills, The Calling of Dan Matthews, The Winning of Barbara Worth, etc.

Harold Bell Wright's

New Story Exalting Life and Love

THEIR YESTERDAYS

¶ Tender with sentiment, pathos, realism. Honors the home, supremely glorifies the wife and mother—delightfully wholesome.

Illustrations in Colors by F. Graham Cootes. Cloth, 12mo. $1.30 Net

Bound uniform with "Barbara Worth"

Harold Bell Wright's Latest and Biggest Novel

The Most Popular Book in All the World

THE WINNING OF BARBARA WORTH

"A book that will mould and make nations."

A Present-Day Story of Reclamation and Love

Illustrations made on the scenes of the story by F. Graham Cootes

Cloth, 12mo. $1.30 Net

¶ Boston Globe—"To the reader the characters will appear as real as friends they know—all of their aims and likes and hatreds being portrayed as true to life as snapshots caught by moving picture cameras.

¶ Cleveland Plain Dealer—"Dan Matthews" was a fine tale. "The Shepherd of the Hills" was an inspiration. And now he sends us "The Winning of Barbara Worth" * * a twentieth century epic.

Other Novels by Mr. Wright Uniform With Above

That Printer of Udell's, The Shepherd of the Hills, The Calling of Dan Matthews

Harold Bell Wright's Famous Allegory of Life

The Uncrowned King

¶ Philadelphia Sunday Dispatch—"The secret of his power is the same God-given secret that inspired Shakespeare and upheld Dickens."

¶ Grand Rapids Herald—"It is the greatest story since Bunyan's Pilgrim's Progress."

Illustrations by John Rea Neill. 16mo. Cloth 50 Cents Net, Full Leather $1.00 Net

ANNOUNCEMENT

To be published in August, 1913—Harold Bell Wright's Next Novel—A Real Love Story

THE EYES OF THE WORLD

First Printing One Million Copies
Advertising Appropriation $100,000

IMPORTANT NOTICE

¶ The Shepherd of the Hills, dramatized by Harold Bell Wright and Elsbery W. Reynolds, is now being produced under leased rights by Gaskill and MacVitty Company and every infringement will be prosecuted.

BOOK CATALOG FREE Our mammoth catalog size 8¾x5¾ inches advertises books of all the publishers at big savings. Bibles. Period cases, etc. Write us for it today. Bargains on every page. Books on all subjects. Hundreds of Fine Sets and Fine Bindings for your library. Every book carried in stock. Catalog sent postage prepaid, free on request.

The Book Supply Company Publishers and Booksellers 231-233 West Monroe Street **Chicago**

Established 1893 E. W. REYNOLDS, President

Over Three Million Harold Bell Wright Books Have Been Sold

For Sale at All Bookstores Or by the Publishers—The Book Supply Company

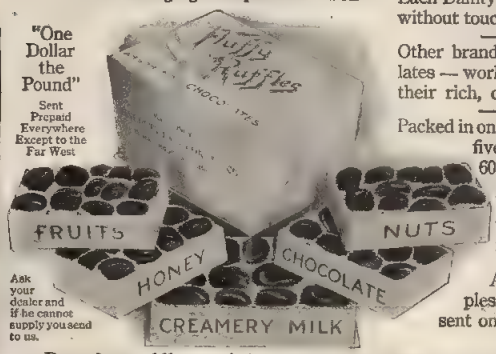
Fluffy Ruffles

"The Sweetmeat Unique"

in the Patent Swinging Compartment Box

"One Dollar the Pound"

Sent Prepaid Everywhere Except to the Far West



Ask your dealer and if he cannot supply you send to us.

Contains fifty-five delicious morsels to the pound.

Each Dainty can be selected without touching the others.

Other brands of our Chocolates — world famous for their rich, creamy centers.

Packed in one, two, three and five pound boxes at 60c to $1 the pound.

We cater only to those who demand the best.

Assorted samples and catalogue sent on receipt of 10c.

Benedetto Allegretti Co. 220-224 Randolph St., Chicago, U. S. A.

INDESTRUCTO

The Safe Arrival of Your Indestructo Luggage Is the Surest Incident of Travel.

Indestructo on your Trunk signalizes that "built-in" strength and endurance, capable of thousands of miles of travel—unwatched and unattended.

Indestructo on your Luggage carries an air of dignity and refinement that marks you as one who demands the best of travel comfort.

Your own feeling of safety is secured by our written guarantee that your trunk must give you five years' honest wear, or you get a new one free.

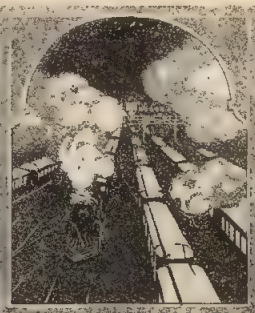
The value of such a trunk as the Indestructo can not be measured by dollars. It is your faithful travel-friend.

You really should not put off the Indestructo Day. You should protect yourself before the emergency happens that leaves you "baggage-less."

Write today for our Travel Book and the name of your dealer.

National Veneer Products Co., 413 Beiger Street, **Mishawaka, Ind.**

When you write, please mention the Cosmopolitan



Where Accurate Time is Vital

Towerman E. F. Heide, of the Rock Island Lines, for 10 years has carried a Hamilton Watch that is highly satisfactory.

The selection of a watch is not a case of sentiment or fad with railroad men. Their watches must be the best. Both men shown above carry Hamiltons and that they are just two out of many thousands of Hamilton owners on railroads is proven by this fact: Over one-half (almost 56%) of the men on American Railroads maintaining Official Time Inspection carry

W. E. Brown, another Rock Island Towerman, who has for 6 years carried a Hamilton that is famous for its accuracy.

The Hamilton Watch

"The Railroad Timekeeper of America"

If you want a watch as accurate as the watches these men carry buy a Hamilton. The Hamilton 12-size shown here is the most accurate and thinnest 19 or 23 jewel 12-size watch made in America. This size sold complete only.

Write for "The Timekeeper"

Hamilton Watches are made in standard watch sizes and sold by leading jewelers everywhere. Your jeweler can fit your present watch case with a Hamilton movement if you desire. Prices of movements only, $12.25 to $40.00. Prices of complete watches timed and adjusted in the case at the factory, $38.50 to $125.00.

a book about watches, containing advice about how to buy a watch that everyone interested in the purchase of a fine watch can profitably read. It contains pictures, descriptions and price list of various Hamilton Models.

HAMILTON WATCH COMPANY
Lancaster, Pa.

When you write please mention the Cosmopolitan

New Varsity styles in clothes for young men

NEVER before have you well-dressed young fellows been offered better clothes than our Varsity models.

Designed for young men; fabrics selected for young men; many new ideas in style and finish. It's a big special department of our business—the making of clothes for young men.

You should see the Varsity models before you buy this fall. You'll find many smart new things that you'll like

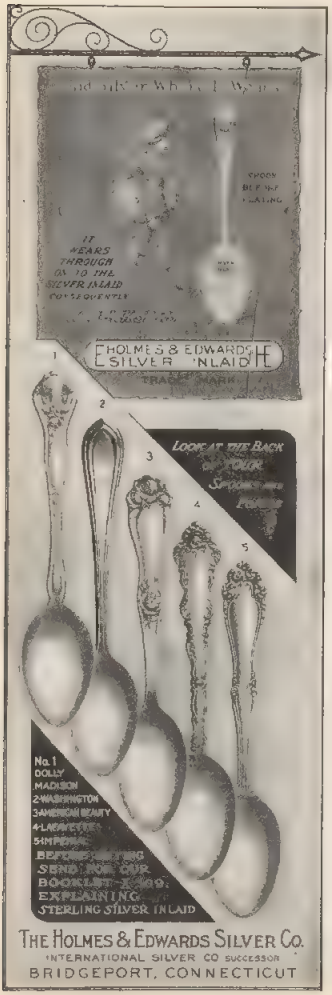
Fine ready-made clothes like these are now the standard of clothes quality; all wool fabrics, best tailoring. Find out mark in them; a small thing to look for, a big thing to find.

Send six cents for the Fall Style Book

Hart Schaffner & Marx

Good Clothes Makers

Chicago New York


IT WEARS THROUGH TO THE SILVER INLAID CONSEQUENTLY
HOLMES & EDWARDS SILVER INLAID
TRADE MARK
LOOK AT THE BACK OF YOUR SPOONS AND FORKS
No. 1 DOLLY MADISON
2 WASHINGTON
3 AMERICAN BEAUTY
4 LAFAYETTE
5 IMPERIAL
BEFORE BUYING SEND FOR OUR BOOKLET X 109 EXPLAINING STERLING SILVER INLAID
THE HOLMES & EDWARDS SILVER CO.
INTERNATIONAL SILVER CO SUCCESSOR
BRIDGEPORT, CONNECTICUT

The New Dessert

NESNAH

Can Be "Made in a Jiffy"

With the aid of fruit, berries, whipped cream, etc., the practical housewife can serve Nesnah in an endless variety of dainty and attractive forms.

You simply dissolve it in milk or cream, let stand a few moments, and you have, ready to serve, a most exquisite dessert.

It is the one **tasty, delicious food-dessert.** Not to be confounded with gelatine preparations.

NINE FLAVORS

VANILLA	PISTACHIO
CHOCOLATE	RASPBERRY
ORANGE	MAPLE
LEMON	CARAMEL

COFFEE

10c a Package

At All Grocers

Sample sent free—full-size package on receipt of 10 Cents. State choice of flavor.

Prepared by

"The Junket Folks"

LITTLE FALLS N. Y.

Standard 20 H.P. Runabout, $750

F. O. B. Detroit, with same power plant that took the world-touring car around the world—4 cylinders, 20 H. P., sliding gears, Bosch magneto. Equipped with top, windshield, gas lamps, and generator, oil lamps, tools and horn. Roadster, 110-inch wheelbase, $850.

Long-Stroke "32" Touring Car, $900

F. O. B. Detroit, including equipment of windshield, gas lamps and generator, oil lamps, tools and horn. Three speeds forward and reverse; center control, sliding gears. Four cylinder motor, 3¼-inch bore and 5½-inch stroke. Bosch magneto; 106-inch wheelbase; 32 x 3½-inch tires. Color: Standard Hupmobile Blue. Roadster, $900

Hupmobile

$750——$900

We believe the Hupmobile to be, in its class, the best car in the world

A miniature tup hammer, dropping from a fixed height to the surface of the metal, determines in one operation the hardness, toughness and strength of all the hear-hardened and heat-treated parts of the Hupmobile.

This instrument, the sclerоscope, enables us to produce cars of uniform wearing quality—parts of uniform hardness and strength

it is made from specially treated open hearth nickel steel—the hardest and toughest the laboratory experts have been able to devise.

It is forged, normalized, heat hardened, double heat-treated; and all surfaces, including the four integral gear keys, are ground.

The little hammer in the sclerоscope is dropped, and its rebound to a figure on an arbitrary scale indicates the hardness of the metal.

A magnified reproduction of this scale and its corresponding figures in pounds of elastic limit is shown

On the Hupmobile transmission drive shaft, the hammer must rebound to a point between 75 and 85 on the scale. Not below 75, to make certain the metal is hard enough, not above 85, to make certain it is not too hard.

This means that the elastic limit is 190,000 to 220,000 pounds to the square inch

In other words, pressure of 190,000 to 220,000 pounds must be applied to produce a fracture—a margin of safety far beyond the most severe requirements.

On other parts, other limits are fixed; because various parts must have varying degrees of hardness to give the longest service.

And this is simply another stone in the foundation of the belief stated above.

And the test by this device is only one of several similar trials to which Hupmobile parts are subjected.

In the picture the operator is proving the transmission drive shaft—one of the finest pieces of mechanical work in the car.

To withstand the severe usage which this shaft undergoes, because it bears the brunt of all the gear-shifting,

HUPP MOTOR CAR COMPANY, 1265 Milwaukee Ave., Detroit, Mich.
Canadian Factory: Windsor, Ontario

The BELL Tailors OF NEW YORK

$20 SUIT or OVERCOAT made to order $13.50

THIS offer will appeal to men who are not only judges of good clothes—but judges of great values as well. Season after season BELL TAILORS save big money for thousands of customers on the finest made-to-order clothes. We can save money for you—at least one-third on your Fall and Winter Suit or Overcoat.

Send for New Fall STYLE BOOK FREE

Every man interested in dressing well and saving money should send for our catalog. It tells how you can get a $20 suit for $13 50. It contains 64 all-wool samples of choice seasonable fabrics to select from; the latest styles photographed from real, live men—showing exactly how they would look on you. It contains full instructions for taking your own measurements or showing how any member of your family can take them as accurately as a tailor. We guarantee a perfect fit from these measurements, or you may return the suit or overcoat and get your money back. If fit is in any way unsatisfactory.

We Sell Direct and Save You One-Third

Our Catalog is our only representative—it goes to thousands who are glad not to be annoyed by agents glad to pocket the commissions on their own orders. If we employed agents, as most other tailoring concerns do, we would have to pay them at least 33⅓% commission and add this to our present prices.

If you are planning to get new clothes this Fall send for our style book and catalog. No matter what priced clothing you are used to wearing we are anxious to come in direct competition with the men who sell you now.

Our most enthusiastic customers are men who never thought it possible to get such master style and such perfect fit by mail and for so little money. The catalog contains many letters from our thousands of pleased customers. Send for it today and let us solve your clothes problem. It is free, and puts you under no obligations by sending.

THE BELL TAILORS of New York
114-118 Walker Street
NEW YORK CITY

M

Men! Men! Men!

More Men Wanted

Write Today—NOW

We want more men right away, and we will pay you big money—more money than you ever thought of making before. Just show our magnificent line of samples—the orders will come in a hurry. Exclusive territory open. Don't delay. Let us tell you how to get one of our handsome suits FREE. Write today.

Earn $30 to $50 a Week

Yes and then some. You can earn big money easily and quickly. No trouble at all in taking orders. Nice, clean, easy work—short hours—and you are your own boss. Or you can keep your present position and make $75.00 to $100.00 a month on the side.

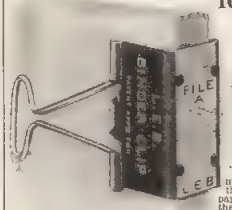
Let Us Start You in Business

Be your own boss. No need to trudge along on a salary. We'll start you in a business of your own—give you a chance to make big money easy. No money needed—no experience necessary. Write now!

Write Today offer right away. Get full particulars of this exceptional offer right away. Just send post card or letter and we will tell you all about it. We send you all necessary complete outfit free—for starting right in to make big money.

The Fidelity Tailors 851 South Fifth Avenue Dept. 25 CHICAGO

A Loose Leaf Binder for 5c



The L. E. B. Binder Clip

You can instantly remove any paper therefrom or add any paper thereto. It is the simplest, cheapest and handiest filing system ever devised. With it letter files are kept on shelves just the same as books.

¶ After the Binder Clip is applied the sheets may be reversed and snapped against the documents or papers and thus kept out of the way. When one arm is reversed against the papers the other forms a good hook or hanger. Send 50c for dozen, prepaid. Money back if not suited. AT ALL STATIONERS

Cushman & Denison Mfg. Co., 240 W. 23d St., Dept. 4, New York City

PIANOS IVERS & POND PIANOS

THE SUCCESSFUL MODELS

shown above will be leaders in the musical centers of the country this fall. In over 400 Educational Institutions and 50,000 homes, the *Ivers & Pond* is giving splendid service, yet never have we built such fine pianos as our line for 1912-1913. If you're interested in the newest and best in pianos *write for our latest catalogue showing the complete line.*

HOW TO BUY Wherever in the U. S. no dealer sells them we ship Ivers & Pond Pianos from the factory on approval. Liberal allowances for old pianos in exchange. Attractive easy payment plans. Catalogue and information of much value to buyers mailed on request. *Write us, to-day.*

IVERS & POND PIANO CO., 111 Boylston Street, BOSTON, MASS.

Brightener Makes Floor-Care Easy!

When you once get a nice floor, you can easily keep it bright and new. It's hardly more work than dusting if you use

Brightener for Floors

once or twice a month. It cleans, freshens up and preserves all finishes, and it makes varnish or wax last twice as long.

You'll find a dozen other uses for Brightener—for removing the dusty, dingy look from furniture and woodwork, cleaning and prolonging the life of linoleum, etc. Isn't oily or greasy. Saves all its cost in saving refinishing bills.

Send for Free Sample and Book

"Beautiful Floors, Their Finish and Care"

Try Brightener—then use it on *your* floors. Write us.

The A. S. BOYLE CO.
2007 West 8th Street
Cincinnati, O.

Dingy floor Clean and bright

Kellogg's TOASTED CORN FLAKES

That Sounds Good to Me!

And morning after morning, it sounds good—and *tastes better*—to fifty million other people. For never before has there been a food of any nature that enjoyed so remarkable a popularity as these delicious, tasty, golden films of corn.

It's the favorite of millions of busy mothers because of its wonderful convenience. And it's the family's favorite food because nothing else has ever equaled its rare, inimitable flavor

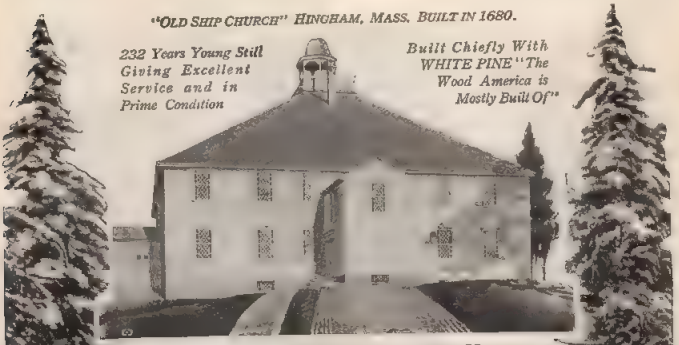
If you are missing this delicious treat get your grocer to introduce you today. And always look for this guarantee of flavor.

W. K. Kellogg

"OLD SHIP CHURCH" HINGHAM, MASS. BUILT IN 1680.

232 Years Young Still Giving Excellent Service and in Prime Condition

Built Chiefly With WHITE PINE "The Wood America is Mostly Built Of"



WHEN YOU BUILD THAT NEW HOME

remember this—there is an *ample* supply of the same high quality WHITE PINE that has given such splendid service in this old church (and countless other buildings) *for more than two centuries.*

The great WHITE PINE forests of Minnesota and Wisconsin are full of it—(interspersed with "Norway," its alternate for most uses).

Good dealers everywhere are *selling* WHITE PINE, "the peoples' lumber since the Pilgrims landed." Good architects everywhere are *specifying* it. Careful builders everywhere are *demanding* it—for siding, for doors, for window sash, for stair rails and newel posts and for both interior and exterior trim.

And those who know, are equally insistent on NORWAY PINE for framing-timbers, storm-and-screen doors and similarly vital utility purposes.

If you have been half-persuaded to use some so-called "cheaper" lumber (which cannot possibly give the dependable service of WHITE and NORWAY PINE)

ABSORB THESE FIGURES—THEY'RE TRUE:

Long experience establishes the fact that even in *all-frame* houses the ratio of lumber cost to total building cost averages only **12%**. The other 88% goes for labor, foundation work, flues, trim, plumbing and other items.

Consequently, even as great a difference as **25%** in the original purchase cost between an absolutely dependable wood like the *NORTHERN* PINES, and other species of lumber (less reliable) would make only a difference of **3%** in the *total* cost of your building!

You cannot afford to endanger the value of your TOTAL investment for a difference of from 1% to 3%.

Can You?

Then write tonight for copies of our two books—

"WHY WHEN WHITE PINE—A Lumber Fact Book" *and* "WHITE PINE VALUE IN HOME BUILDING".

You will find them worth *getting* and *reading* and *keeping* if you are ever going to buy lumber for any purpose. They are *FREE. WRITE TONIGHT.*

NORTHERN PINE MANUFACTURERS' ASS'N

1128 Lumber Exchange **Minneapolis, Minn.**

When you write, please mention the Cosmopolitan

This page is for Children

Kewpie Kutouts

in Many Colors

Every Month in Woman's Home Companion

Wag, the Chief —his back

THE Kewpies were invented by Rose O'Neill. They are always doing good, helping Dotty Darling and her Baby Brother to have a good time whenever the older children won't let them tag along. Now all the children want to cut out the Kewpies. And the Kewpies want to be cut out by the children. So Rose O'Neill has made the Kewpie Kutouts. There is a whole page of them for you in the October copy of the Woman's Home Companion—a magazine with pages and pages for children and their mothers.

Wag, the Chief

This is Wag, the Chief. He is Captain of the band of Kewpies that have been making things so pleasant for Very Little Boy, whose mothers take the Woman's Home Companion. When you cut him out and paste him together, he makes a real Kewpie whichever way you look at him. In the October Woman's Home Companion you will find Wag in color, not plain black and white like he is here, and Dotty Darling (with two dresses), and Dotty's Baby Brother—all ready to be cut out. A delightful story about Dotty Darling and her Kewpies is a page and a half of reading matter.

Dotty Darling is over five inches high in the Kewpie Kutout

Kewpie Kutouts

The Kewpies are the first cut outs to have real backs

Ask your Mother for 15 cents

—then hurry to a news-stand and buy the October Woman's Home Companion which has the first of the Kewpie Kutouts, or send the 15 cents to us right away with your name and address on the Kewpie Kupon. We will send you by return mail the October Woman's Home Companion, postage paid.

"Use this Kupon"

WOMAN'S HOME COMPANION

at 381 Fourth Avenue, New York

Woman's Home Companion 381 Fourth Ave. New York

Here is my 15c. Please send me right away the October Woman's Home Companion containing the first of the Kewpie Kutouts.

Name ....

Address ....

500 Shaves
from 12 Blades
Guaranteed

(2 Mills per Shave)
Guaranteed

ANYONE failing to get 500 Head Barber shaves from any package of 12 AutoStrop blades will please send his 12 used blades to us, tell us how many shaves he is short, and we'll send him enough new blades to make good his shortage (and postage). The era of Guaranteed Shaving is here.

WE'RE IN THE BLADE SAVING BUSINESS.

THE AutoStrop Razor is not a maker of blade expense, but a saver of it. It is a practical razor. In business everyone is hunting for practical things. In shaving we seem to hunt always for impractical things—impractical razors

The Head Barber has the only practical method of making his keen edge last through many shaves, i.e., by stropping.

Why should anyone try to keep away from this practical method instead of trying to get in on it?

The AutoStrop Razor was built so everybody can get in on the practical Head Barber stropping. With it the novice can strop a Head Barber's edge, can strop at least 500 shaves on 12 blades, and can do the stropping as speedily and easily as the Head Barber, because he strops, shaves, cleans without detaching blade.

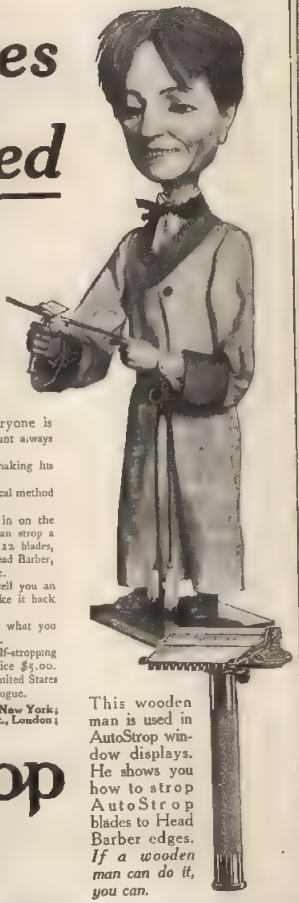
Do not be modest about asking the dealer to sell you an AutoStrop Razor on thirty days' free trial, for if you take it back we protect him from loss.

As Ben Franklin said, "Don't put off till tomorrow what you can do today." 'Phone for an AutoStrop Razor today.

The AutoStrop Razor consists of silver plated, self-stropping razor, 12 blades and strop in handsome case. Price $5.00. Travelling sets also, $6.50 up. Price in Canada and United States the same. Factories in both countries. Send for catalogue.

AUTOSTROP SAFETY RAZOR CO., 355 5th Ave., New York; 400 Richmond St., W., Toronto; 61 New Oxford St., London; Schleusenbrücke, No. 8, Hamburg

AutoStrop
SAFETY RAZOR
Strops Itself



This wooden man is used in AutoStrop window displays. He shows you how to strop AutoStrop blades to Head Barber edges. *If a wooden man can do it, you can.*

Knox Fall Hats Are on Sale at Agencies in Every Important City of the World

Catalogue on Application

THE KNOX HAT MANUFACTURING COMPANY

Wholesale Salesrooms. 452 Fifth Avenue, New York
Factory: Brooklyn, N. Y.

Restful Light

in your home

Eyes and nerves are just as much injured by glare as by insufficient light.

Your children and the rest of your family will work better and sleep better afterwards if they spend their evenings surrounded by soft, restful, and ample (but not glaring) light.

Such illumination, when the costs of shades and electric current are both considered, is apt to cost even less than the poor illumination found in the average home. This is mostly a matter of

the right shades and globes

which get the most light from your current, and light that is easy on the eyes. The right shades and globes are also handsome, harmonizing with and bringing out the beauty of the other furnishings, and radiate a soft and pleasant glow to every nook and corner of your room.

One of the most elaborate of these is the Georgian combination of direct and semi-indirect illumination illustrated above. The whole shade is opalescent. The body delicately tinted, and the pattern deep-etched in pearl white. Others, equally elaborate or very simple, are shown in our catalogue.

Send for our Catalogue No 42 of Shades and Globes—Alba and the many other kinds we make for electricity and gas. Give us your dealer's name. He has, or can get, any Macbeth Evans shade or globe you desire.

Registered U. S. Pat. Off.

Macbeth-Evans Glass Company
Pittsburgh
Sales- and Show-rooms also in New York, Chicago, Philadelphia, St Louis
Boston and Toronto

Marlin

Big Game Repeating Rifles Model 1893

Accurate, quick-handling, dependable—big game falls ready prey to its tremendous shocking and killing power.

Its Smokeless Steel barrel, rifled deep after the famous Ballard system, is built especially to withstand the continued use of high power smokeless loads with jacketed bullets.

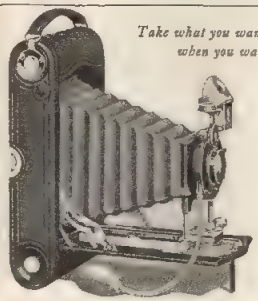
No opening at top—a thick wall of solid steel stands between cartridge chamber and shooter's face. Rain, sleet and foreign matter cannot enter action.

Side-ejecting—the empty shell never spoils the aim of a quick repeat-shot. Handsomely finished and perfectly balanced.

Send 2c postage for new catalog showing complete line of *Marlin* repeaters, rifles and shotguns.

20 Willow St.

The *Marlin* Firearms Co., New Haven, Ct.



Take what you want, when you want it.

Snap-shots on cloudy days, snap-shots in light shade—even in-door snap-shots when conditions are right—all are easy with a

Special KODAK

Its Zeiss-Kodak lens and Compound shutter give it capabilities not found in other cameras—yet it retains the Kodak simplicity. Superbly finished.

No. 1A, for pictures 2½ x 4¼	- - - -	$50.00
No. 3, " " 3¼ x 4¼	- - - -	50.00
No. 3A, " " 3¼ x 5½	- - - -	65.00

EASTMAN KODAK CO.,

Catalog free at the dealers or by mail. Rochester, N. Y.

I Want Some of

THE BLACK SHELLS

Our free book on shells contains much practical and useful information about modern improvements in ammunition. Write for it.

Here are some things it will tell you about:

Modern Construction—THE BLACK SHELLS have a solid brass head, no battery cup, no crevices through which the gases of explosion are wasted through leaking backward.

Waterproofing—THE BLACK SHELLS are better waterproofed even than our famous old CLIMAX shells. You know how strong a claim that is

Modern Crimping—THE BLACK SHELLS are crimped with exceeding firmness and smoothness. They work through an automatic or pump gun as though they were greased.

The finest new thing in 20 years of ammunition history is our Non-Mercuric Primer. It sets new standards of uniformity and speed. Don't fail to read the paragraphs upon this subject in the book.

Our Flash Passage is double the ordinary size—allowing twice as much of the primer flame to rush directly into the main charge.

Any one of these modernisms is enough to make the reputation of a shell. Think of getting all five combined together. Try the shells. Send for book.

There are three classes of THE BLACK SHELLS:

ROMAX, a black powder shell with 5/16-in. brass.

CLIMAX, the most popular smokeless (both dense and bulk) shell made (⅜ inch brass).

AJAX, is the highest grade smokeless (both bulk and dense) shell made. Has a long one-inch brass.

United States Cartridge Co.

Dept. W **LOWELL, MASS., U. S. A.**

Automobile repair bills—their most common cause

Recently we made a canvass of automobile repair shops in New York.

We asked the question: "What share of the engine troubles that come to you are caused by poor lubrication?"

The answers ranged from "33%" to "70%."

Probably every owner of these damaged cars *thought* he was using a good lubricating oil.

As a matter of fact, oils that yield efficient lubrication are rare. And their wearing quality is often overlooked.

A worn-out oil thins down and ceases to lubricate.

Then comes trouble—pitted and burned-out bearings, "frozen" pistons, scratched cylinders, and even broken parts.

You cannot watch the lubricating process in your wrist pins, bearings and cylinders. But you *can* be sure of this—

An oil that is wearing poorly, is lubricating poorly.

Gargoyle Mobiloil was produced after careful study, by the world's authoritative leaders in scientific lubrication, the Vacuum Oil Company.

In wearing quality, few automobile lubricating oils on the market even approach it. We speak from experience. You can demonstrate it for yourself.

It is not low priced, but in economy and lubricating efficiency we can safely say that Gargoyle Mobiloil stands alone.

The chart on the right shows the correct grade for 111 cars. Our complete chart, covering 400 cars, mailed on request.

GARGOYLE

Mobiloil

A grade for each type of motor

The various grades, refined and filtered to remove free carbon, are:

Gargoyle Mobiloil "A" **Gargoyle Mobiloil "D"**
Gargoyle Mobiloil "B" **Gargoyle Mobiloil "E"**
Gargoyle Mobiloil "Arctic"

They are put up in 1 and 5 gallon sealed white cans, in half-barrels and barrels.

All are branded with the Gargoyle, which is our mark of manufacture.

They are handled by the higher class garages, automobile supply stores, and others who supply lubricants.

A guide to correct Automobile lubrication

Explanations: In the schedule the letter opposite the car indicates the grade of Gargoyle Mobiloil that should be used. For example, "A" means "Gargoyle Mobiloil A." "Arc" means "Gargoyle Mobiloil Arctic." For all electric vehicles use Gargoyle Mobiloil A. The recommendations cover both pleasure and commercial vehicles unless otherwise noted.

CARS	1912	1911	1910	1909	1908	1907	1906
Abbott-Detroit	A	A	A	A	A	A	A
Acme	A	A	A	A	A	A	A
Adams-Farwell	A	Arc	Arc	Arc	Arc	Arc	Arc
Alco	A	A	A	A	A	A	A
Allen	A	A	A	A	A	A	A
Allen-Kingston	A	A	A	A	A	A	A
Allen-Kingston Com'l	A	A	A	A	A	A	A
Alter	A	A	A	A	A	A	A
American	A	A	A	A	A	A	A
American Com'l	A	A	A	A	A	A	A
Apperson	A	A	A	A	A	A	A
Atlas	A	A	A	A	A	A	A
Auburn	A	A	A	A	A	A	A
Autocar	A	A	A	A	A	A	A
Autocar Com'l	A	A	A	A	A	A	A
Autocrat	A	A	A	A	A	A	A
Baker Electric	A	A	A	A	A	A	A
Barley	A	A	A	A	A	A	A
Belden	A	A	A	A	A	A	A
Bell	A	A	A	A	A	A	A
Benham	A	A	A	A	A	A	A
Benham Com'l	A	A	A	A	A	A	A
Berg	A	A	A	A	A	A	A
Berg Com'l	A	A	A	A	A	A	A
Berger	A	A	A	A	A	A	A
Berger Com'l	A	A	A	A	A	A	A
Bergdoll	A	A	A	A	A	A	A
Bessemer	A	A	A	A	A	A	A
Bessemer Com'l	A	A	A	A	A	A	A
Biddle	A	A	A	A	A	A	A
Biddle Com'l	A	A	A	A	A	A	A
Bowman	A	A	A	A	A	A	A
Brasier	A	A	A	A	A	A	A
Brasier Com'l	A	A	A	A	A	A	A
Brewster	A	A	A	A	A	A	A
Brewster Com'l	A	A	A	A	A	A	A
Briscoe	A	A	A	A	A	A	A
Brush	A	A	A	A	A	A	A
Brush Com'l	A	A	A	A	A	A	A
Buick	A	A	A	A	A	A	A
Buick Com'l	A	A	A	A	A	A	A
Cadillac	A	A	A	A	A	A	A
Cadillac Com'l	A	A	A	A	A	A	A
Carter	A	A	A	A	A	A	A
Case	A	A	A	A	A	A	A
Case Com'l	A	A	A	A	A	A	A
Chalmers	A	A	A	A	A	A	A
Chalmers Com'l	A	A	A	A	A	A	A
Chase	B	B	B	B	B	B	B
Chase Com'l	B	B	B	B	B	B	B
Cole	A	A	A	A	A	A	A
Cole Com'l	A	A	A	A	A	A	A
Columbia Electric	A	A	A	A	A	A	A
Columbia Gasoline	A	A	A	A	A	A	A
Columbia Com'l	A	A	A	A	A	A	A
Commerce	A	A	A	A	A	A	A
Commerce Com'l	A	A	A	A	A	A	A
Corbin	A	B	A	A	A	A	A
Corbin Com'l	A	B	A	A	A	A	A
Crawford	A	A	A	A	A	A	A
Crawford Com'l	A	A	A	A	A	A	A
Crow-Elkhart	A	A	A	A	A	A	A
Cunningham	A	A	A	A	A	A	A
Cunningham Com'l	A	A	A	A	A	A	A
Dayton	A	A	A	A	A	A	A
Dayton Com'l	A	A	A	A	A	A	A
Delaunay-Belleville	A	A	A	A	A	A	A
Detroit Electric	A	A	A	A	A	A	A
Dodge Bros.	A	A	A	A	A	A	A
Dodge Bros. Com'l	A	A	A	A	A	A	A
Elmore	A	A	A	A	A	A	A
Empire	A	A	A	A	A	A	A
Empire Com'l	A	A	A	A	A	A	A
Fiat	A	A	A	A	A	A	A
Fiat Com'l	A	A	A	A	A	A	A
Flanders	A	A	A	A	A	A	A
Flanders Com'l	A	A	A	A	A	A	A
Ford	A	A	A	A	A	A	A
Ford Com'l	A	A	A	A	A	A	A
Franklin	A	A	A	A	A	A	A
Franklin Com'l	A	A	A	A	A	A	A
Gramm	A	A	A	A	A	A	A
Gramm-Lipps	A	A	A	A	A	A	A
Grant	A	A	A	A	A	A	A
Grant Com'l	A	A	A	A	A	A	A
Hal	A	A	A	A	A	A	A
Hal Com'l	A	A	A	A	A	A	A
Hanson	A	A	A	A	A	A	A
Hanson Com'l	A	A	A	A	A	A	A
Harroun	A	A	A	A	A	A	A
Harroun Com'l	A	A	A	A	A	A	A
Hatfield	A	A	A	A	A	A	A
Hatfield Com'l	A	A	A	A	A	A	A
Haynes	A	A	A	A	A	A	A
Haynes Com'l	A	A	A	A	A	A	A
Hollier	A	A	A	A	A	A	A
Hollier Com'l	A	A	A	A	A	A	A
Hudson	A	A	A	A	A	A	A
Hudson Com'l	A	A	A	A	A	A	A
Hupmobile	A	A	A	A	A	A	A
Hupmobile Com'l	A	A	A	A	A	A	A
Imperial	A	A	A	A	A	A	A
Imperial Com'l	A	A	A	A	A	A	A
Inter-State	A	A	A	A	A	A	A
Inter-State Com'l	A	A	A	A	A	A	A
Jackson	A	A	A	A	A	A	A
Jackson Com'l	A	A	A	A	A	A	A
Jeffery	A	A	A	A	A	A	A
Jeffery Com'l	A	A	A	A	A	A	A
Kline Kar	A	A	A	A	A	A	A
Kline Kar Com'l	A	A	A	A	A	A	A
Knox	B	B	B	A	A	A	A
Knox Com'l	B	B	B	A	A	A	A
Lambert	A	A	A	A	A	A	A
Lambert Com'l	A	A	A	A	A	A	A
Lane	A	A	A	A	A	A	A
Lane Com'l	A	A	A	A	A	A	A
Lexington	A	A	A	A	A	A	A
Lexington Com'l	A	A	A	A	A	A	A
Lion	A	A	A	A	A	A	A
Lion Com'l	A	A	A	A	A	A	A
Locomobile	A	A	A	A	A	A	A
Locomobile Com'l	A	A	A	A	A	A	A
Lozier	A	A	A	A	A	A	A
Lozier Com'l	A	A	A	A	A	A	A
Mack	A	A	A	A	A	A	A
Mack Com'l	A	A	A	A	A	A	A
Marathon	A	A	A	A	A	A	A
Marathon Com'l	A	A	A	A	A	A	A
Marion	A	A	A	A	A	A	A
Marion Com'l	A	A	A	A	A	A	A
Marmon	B	B	B	B	B	B	B
Marmon Com'l	B	B	B	B	B	B	B
Maxwell	A	A	A	A	A	A	A
Maxwell Com'l	A	A	A	A	A	A	A
Mercedes	A	A	A	A	A	A	A
Mercedes K-gine	A	A	A	A	A	A	A
Mercer	A	A	A	A	A	A	A
Mercer Com'l	A	A	A	A	A	A	A
Metz	A	A	A	A	A	A	A
Metz Com'l	A	A	A	A	A	A	A
Michigan	A	A	A	A	A	A	A
Michigan Com'l	A	A	A	A	A	A	A
Midland	A	A	A	A	A	A	A
Midland Com'l	A	A	A	A	A	A	A
Mitchell	A	A	A	A	A	A	A
Mitchell Com'l	A	A	A	A	A	A	A
Moline	A	A	A	A	A	A	A
Moline Com'l	A	A	A	A	A	A	A
Moline-Knight	A	A	A	A	A	A	A
Moline-Knight Com'l	A	A	A	A	A	A	A
Monarch	Arc	Arc	Arc	Arc	Arc	Arc	Arc
Monarch Com'l	Arc	Arc	Arc	Arc	Arc	Arc	Arc
Moon	A	A	A	A	A	A	A
Moon Com'l	A	A	A	A	A	A	A
Morgan & Wright	A	A	A	A	A	A	A
Morgan & Wright Com'l	A	A	A	A	A	A	A
Motor Car	A	A	A	A	A	A	A
Motor Car Com'l	A	A	A	A	A	A	A
Moyer	A	A	A	A	A	A	A
Moyer Com'l	A	A	A	A	A	A	A
Napoleon	A	A	A	A	A	A	A
Napoleon Com'l	A	A	A	A	A	A	A
National	A	A	A	A	A	A	A
National Com'l	A	A	A	A	A	A	A
Nelson	A	A	A	A	A	A	A
Nelson Com'l	A	A	A	A	A	A	A
Nordyke & Marmon	B	B	B	B	B	B	B
Nordyke & Marmon Com'l	B	B	B	B	B	B	B
Oakland	A	A	A	A	A	A	A
Oakland Com'l	A	A	A	A	A	A	A
Oldsmobile	A	A	A	A	A	A	A
Oldsmobile Com'l	A	A	A	A	A	A	A
Overland	A	A	A	A	A	A	A
Overland Com'l	A	A	A	A	A	A	A
Owen	A	A	A	A	A	A	A
Owen Com'l	A	A	A	A	A	A	A
Packard	A	A	A	A	A	A	A
Packard Com'l	A	A	A	A	A	A	A
Paige	A	A	A	A	A	A	A
Paige Com'l	A	A	A	A	A	A	A
Pathfinder	A	A	A	A	A	A	A
Pathfinder Com'l	A	A	A	A	A	A	A
Peerless	A	A	A	A	A	A	A
Peerless Com'l	A	A	A	A	A	A	A
Pierce	A	A	A	A	A	A	A
Pierce Com'l	A	A	A	A	A	A	A
Pierce-Arrow	A	A	A	A	A	A	A
Pierce-Arrow Com'l	A	A	A	A	A	A	A
Pilot	A	A	A	A	A	A	A
Pilot Com'l	A	A	A	A	A	A	A
Pope-Hartford	A	A	A	A	A	A	A
Pope-Hartford Com'l	A	A	A	A	A	A	A
Pope-Motor Car	A	A	A	A	A	A	A
Pope-Motor Car Com'l	A	A	A	A	A	A	A
Pope-Toledo	A	A	A	A	A	A	A
Pope-Toledo Com'l	A	A	A	A	A	A	A
Premier	A	A	A	A	A	A	A
Premier Com'l	A	A	A	A	A	A	A
Pullman	A	A	A	A	A	A	A
Pullman Com'l	A	A	A	A	A	A	A
Rambler	A	A	A	A	A	A	A
Rambler Com'l	A	A	A	A	A	A	A
Reading-Standard	A	A	A	A	A	A	A
Reading-Standard Com'l	A	A	A	A	A	A	A
Regal	A	A	A	A	A	A	A
Regal Com'l	A	A	A	A	A	A	A
Reo	A	A	A	A	A	A	A
Reo Com'l	A	A	A	A	A	A	A
Republic	A	A	A	A	A	A	A
Republic Com'l	A	A	A	A	A	A	A
Rider-Lewis	A	A	A	A	A	A	A
Rider-Lewis Com'l	A	A	A	A	A	A	A
Roamer	A	A	A	A	A	A	A
Roamer Com'l	A	A	A	A	A	A	A
Robinson	A	A	A	A	A	A	A
Robinson Com'l	A	A	A	A	A	A	A
Rock Falls	A	A	A	A	A	A	A
Rock Falls Com'l	A	A	A	A	A	A	A
Roebling	A	A	A	A	A	A	A
Roebling Com'l	A	A	A	A	A	A	A
Rutenber	A	A	A	A	A	A	A
Rutenber Com'l	A	A	A	A	A	A	A
Saxon	A	A	A	A	A	A	A
Saxon Com'l	A	A	A	A	A	A	A
Selden	A	A	A	A	A	A	A
Selden Com'l	A	A	A	A	A	A	A
Simplex	A	A	A	A	A	A	A
Simplex Com'l	A	A	A	A	A	A	A
Speedwell	A	A	A	A	A	A	A
Speedwell Com'l	A	A	A	A	A	A	A
Stanley Steamer	A	A	A	A	A	A	A
Stanley Steamer Com'l	A	A	A	A	A	A	A
Stearns	A	A	A	A	A	A	A
Stearns Com'l	A	A	A	A	A	A	A
Stevens-Duryea	A	A	A	A	A	A	A
Stevens-Duryea Com'l	A	A	A	A	A	A	A
Studebaker	A	A	A	A	A	A	A
Studebaker Com'l	A	A	A	A	A	A	A
Stutz	A	A	A	A	A	A	A
Stutz Com'l	A	A	A	A	A	A	A
Thomas	A	A	A	A	A	A	A
Thomas Com'l	A	A	A	A	A	A	A
Velie	A	A	A	A	A	A	A
Velie Com'l	A	A	A	A	A	A	A
White Steamer	A	A	A	A	A	A	A
White Steamer Com'l	A	A	A	A	A	A	A
White Gas	Arc	Arc	Arc	Arc	Arc	Arc	Arc
White Gas Com'l	Arc	Arc	Arc	Arc	Arc	Arc	Arc
Wilson	D	D	D	D	D	D	D
Wilson Com'l	E	E	E	E	E	E	E

VACUUM OIL CO., Rochester, U. S. A.

BRANCHES: DETROIT Ford Building; BOSTON 49 Federal St.; NEW YORK 29 Broadway; CHICAGO Fisher Building; PHILADELPHIA 4th & Chestnut Sts.; INDIANAPOLIS Indiana Pythian Bldg.

Distributing warehouses in the principal cities of the world

No-Rim-Cut Tires

The Goodyear Code

In these days of complaint regarding Big Business, let us cease talking tires for a moment or two, and tell you the Goodyear Code.

We maintain in the tire business complete independence. We have no trade alliances, no gentlemen's agreements.

The Goodyear concern will not amalgamate with any rival interest.

Even our patents are licensed to others, to avoid the slightest taint of monopoly.

For we believe in active competition. Rivalry keeps men on their mettle. There is no better way to insure square deals to consumers.

Limited Profits

We believe in modest capitalization. Fictitious capital calling for dividends is a major cause in the high cost of living. There is not a dollar of water in our capital stock.

We insist on moderate profits. Our profit last year on No-Rim-Cut tires averaged 8½ per cent.

That was the profit in the world's largest tire business, where enormous output and modern equipment have cut factory costs to the minimum.

Profit Sharing

We believe that men must have incentive to do their level best. And the best incentive is a share in the earnings. So 134 of our leading men share in the Goodyear profits. The Company has helped them acquire their stock.

In our factories, building tires, there are 49 stockholders. In our office there are 33.

And our branch managers, wherever you meet them, are stockholders in this concern, vitally interested in giving service and treatment that will increase our circle of friends.

Ninety per cent of the Goodyear common stock is owned by the men on whom its value depends.

Young Men

We believe in young men, and our organization consists of them.

In our factory we insist on men of capacity, and on technical education. We send men every year to great technical schools to pick the ablest graduates.

With all these men we insist on fair dealing and on utter regard for the truth. There lies, perhaps, the chiefest reason for the Goodyear growth. Men who know us have boundless faith in what the Goodyear people do.

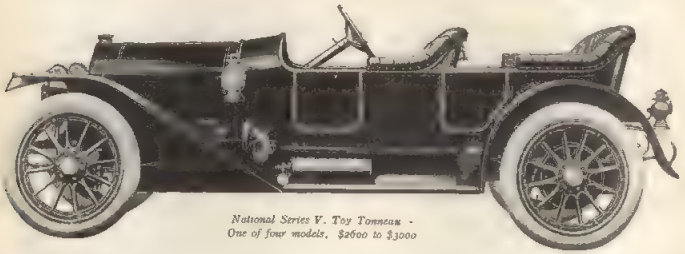
STOCK CHAMPION

National car won and still holds Stock Championship at Elgin road races, 305.03 miles average of 66 4 miles per hour, entire race run without a tire change, defeating more expensive cars.

National 40

INTERNATIONAL CHAMPION

National car won International Sweepstakes race at Indianapolis, defeating best of American and Foreign cars. Actual running average 81.72 miles per hour. Breaking world's record. 500 miles in 381 minutes and 6 seconds.



National Series V. Toy Tonneau - One of four models, $2600 to $3000

For Those Who Want the Best

THIS fact is significant—eighty per cent. of the National cars built this year have been taken by discriminating people amply able to buy any car and who, furthermore, have owned far more expensive cars. This reflects the perfect quality of National cars, and confirms the twelve years of manufacturing experience that guarantees the National you buy.

Women's Motoring Apparel

1913 Styles

Two 1913 Style Books FREE

"Women's Motoring Apparel" is a handsome, illustrated booklet giving you the acme of the latest styles in motoring modes for women. We will gladly send this to you, along with our 1913 Motor Car Style Book which gives you the correct and latest designs in motor car construction and finish. Write today for these two complimentary books. Also—while they last—you may have a copy of the 500-mile Race Book.

National Motor Vehicle Company
Indianapolis, Ind.

NATIONAL MOTOR VEHICLE CO.
Indianapolis, Indiana

Dear Sirs. Please send me your two 1913 Style Books

Name.

Address

Like the Jewels in a Watch

So are the bearings in the axles of a motor-car.

As the jewels are necessary for lasting service and year-after-year accuracy in a high-grade time-piece—

So good bearings are the prime service-essentials in the axles that are to carry you in safety and comfort during the life of your car.

TIMKEN
BEARINGS & AXLES

Rear Axle Bearings Must Do Far More Than Cut Down Friction

1 At the axle-ends in the wheels they have to carry the load and stand all the shocks due to roughness of travel.

Roller Bearings do this along the whole length of their rollers.

2 They must stand end thrust—present at every turn

Tapered Rollers do this because they revolve at an angle to the shaft.

3 At the differential and the driving pinion they must keep shafts in line and hold gears in perfect mesh as well as carry vertical and end pressure

Timken Tapered Roller Bearings do *all* these things—and do them *all* the time

Because they are adjustable

When the parts do wear so that excessive play in any rotating part of a wheel can be completely taken up by merely advancing the cone farther into the cup. The Timken bearings are just as good as new.

A Good Rear Axle Must Meet Four Great Service Tests

1 The rear axle must carry more than half the weight of the car and its load.

The Timken-Detroit is built for strength—plenty of strength and then more to make sure—without useless weight.

2 The rear axle is next to the road and gets all the jar and vibration.

This necessitates the careful construction which, in a Timken-Detroit Axle, extends even to the grinding of hundreds of separate pieces of steel to an accuracy of less than the thousandth part of an inch.

3. The rear axle must deliver maximum power from the engine.

The accuracy of Timken-ground gears, the long life of Timken bearings; the unit-construction of the entire driving-plant—all work to this result.

4 Through its brakes the rear-axle takes up the stresses of stopping the car

Timken brakes hold like a vise, but stop the car without chatter or jolt.

No matter how good a rear axle it is not good enough without the best bearings

You can get the whole story of axles and bearings importance and construction by writing to either address below for the Timken Primers B-5 "On the Care and Character of Bearings," and B-6 "On the Anatomy of Automobile Axles."

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Load and end-thrust come on the whole length of these tapered rollers—not on points as with ball-bearings. Result: Longer life, less wear, safety, satisfaction.

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The brush may be raised or lowered, setting it to sweep clean any kind of carpet

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The *"Ladder Feed"* controls the flow of ink, supplying the exact amount necessary, no more—no less.

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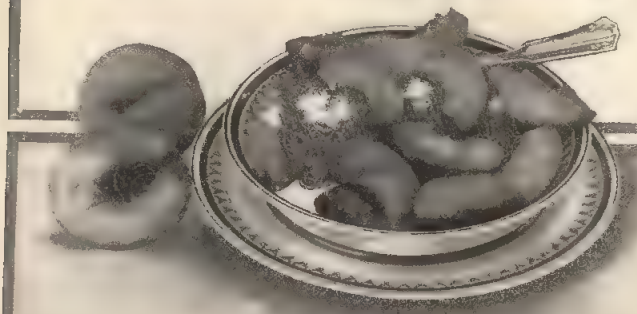

September brings a new "school problem" into thousands of American homes—a problem that must be settled in the interest of mental, moral and physical culture. Education at the sacrifice of health is a costly luxury. "What school" is not half so important as "What food." The best food to study on, to play on, to work on is

Shredded Wheat

It is the favorite cereal food in American schools as well as American homes because it contains all the muscle-making, brain-building material in the whole wheat grain prepared in its most digestible form.

Nothing so wholesome and delicious and nothing so easy to prepare as Shredded Wheat Biscuit with peaches and cream Heat one or more Biscuits in the oven to restore crispness and then cover with sliced peaches or other fresh fruits. Serve with milk or cream and sweeten to suit the taste.

TRISCUIT is the Shredded Wheat wafer, a crisp, tasty toast eaten with butter, soft cheese or marmalade. Delicious for luncheons, for picnics or excursions on land or sea.

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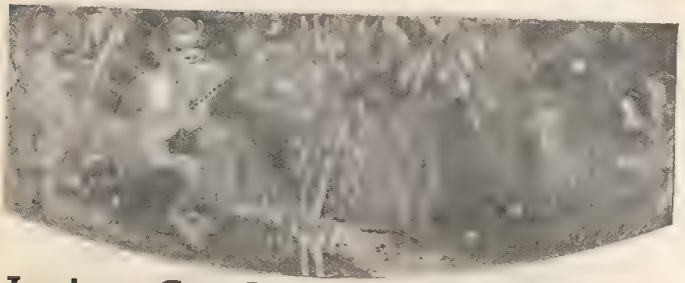

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PIANO

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Send for this sample box today. Take one tablet before each meal and one before retiring. Then watch your weight scale up, your face fill out, your nervousness disappear and your confidence and courage grow greater day by day.

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GET EVERY PARTICLE OF NOURISHMENT FROM FOOD YOU EAT

so badly need but which **now goes to waste** with every meal you eat. SARGOL, by mixing with your food, and correcting the chronic comings of your digestive tract turns into pounds of strengthening invigorating fat the immense amount of food nourishment you

The *Little* Alarm Clock With the Musical Voice

PRICES
of the Junior Tattoo Family clocks are from $1.75 to $4.50

THE JUNIOR TATTOO is small—hardly larger than a watch. It is attractive—graceful in form and handsome in finish. It is tuneful—its pleasing voice calls you so gently that you awake cheerfully and without a shock.

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Junior Tattoo Family

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Alarm Clocks Beautiful

The JUNIOR is only one of nine patterns in the Junior Tattoo Family. Their artistic designs and finishes prove that it's possible to make alarm clocks just as beautiful as they are useful.

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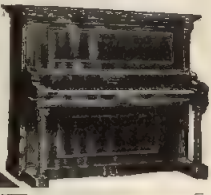

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Father and Daughter both raised on

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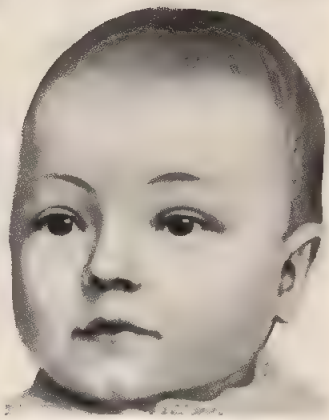

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Prest-O-Liter
Perfect convenience plus Prest-O-Lite economy and reliability.

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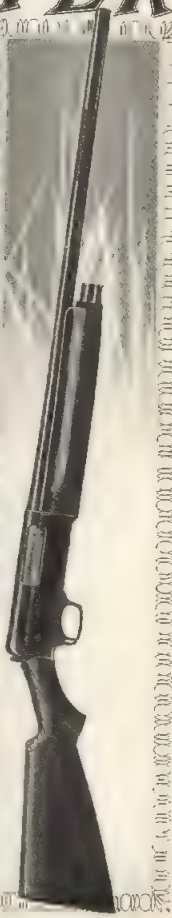
The genuine Prest-O-Lite Tank, when empty, can be immediately exchanged for a full one, ANYWHERE and ALWAYS. Imitations cannot.

The dealer who sells you a counterfeit in exchange for your Prest-O-Lite Tank gets the best of you. Don't let him! Watch it!

We will not be responsible for short measure or poor gas in tanks not filled by us. Protect yourself by looking for our label.

If you have any trouble in realising the perfect satisfaction which we aim to give, write us.

WINCHESTER



Self-Loading Shotgun

12 GAUGE, MODEL 1911

The Winchester Self-Loading Shotgun has all the good points of other recoil-operated shotguns and also many distinctive and exclusive features which sportsmen have been quick to appreciate and endorse. Among them are Nickel steel construction throughout; a receiver made with the Winchester patented "Bump of Strength" which gives the gun surpassing strength and safety; divided recoil, which minimizes the "kick" to the last degree; and a reloading system which requires no readjustment for different loads. The Winchester Self-Loader will shoot any standard load from a "Blank" to the heaviest with certainty and safety, without tinkering the action. Also it is a two-part take-down without any loose parts. These are only a few of the many good points about this gun. To fully appreciate its superiority, you should see it.

Look one over at your dealer's, or send to the Winchester Repeating Arms Co., New Haven, Conn., for descriptive circular

IT WORKS WELL WITH ALL LOADS

Five ways of using Woodbury's Facial Soap

1st—The mildest action in using Woodbury's Facial Soap is produced by washing in the usual way.

2nd—A stronger effect is produced by rubbing its thick lather into the skin for several minutes, then wiping it off with a dry towel.

3rd—A still stronger effect—just what is needed for sluggish skins—is produced by rubbing the lather into the skin and leaving it on all night.

4th—The greatest possible effect results from rubbing its stimulating lather into the skin, and, while it is still damp, covering your face with rubber tissue or oil skin.

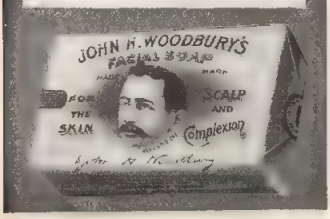
5th—FOR USERS OF GREASE CREAMS—A very marked effect is produced if its lather is first rubbed on and then massaged over and over again into the skin. The tonic action of its lather is far better than grease creams for the skin—is just what the skin needs.

Woodbury's Facial Soap costs 25c a cake. No one hesitates at the price *after their first cake*.

Woodbury's Facial Soap

For sale by dealers everywhere.

For 50c we will send a sample cake. For 10c samples of Woodbury's Facial Soap, Facial Cream and Powder. For 2c a copy of the Woodbury Book and samples of the Woodbury preparations. Write today to the Andrew Jergens Co., Dept. I, Spring Grove Ave., Cincinnati, O.



If Mercury and Air Didn't Go Up *Fountain Pens Wouldn't Leak*

WHEN mercury in a thermometer gets warm it goes up.

When air in a fountain pen gets warm in your pocket it goes up too—up the feed tube.

Now, this "going up" habit of air is what makes all the ink-smearing trouble.

It happens like this: When you set an ordinary fountain pen in your pocket, point up, some lazy ink stays up in the feed tube—won't all run down.

Up goes the heated air through the inky feed tube, pushing the lazy ink up and out all over the writing end of the pen.

Now, George S. Parker, of Janesville, Wisconsin, said: "I'll get all the ink down out before the heated air goes up."

So he invented a *curved feed tube*, which bends and touches the barrel wall. This touch sucks all ink out of the feed tube and drops it in the reservoir below the instant you set a Parker Pen in your pocket.

That is what makes it impossible for air to force ink out on the writing end of a Parker Pen.

The curved feed tube is called the Lucky Curve, and that queer force, Capillary Attraction, which makes a sugar lump suck coffee, is what sucks the ink out of the Lucky Curve.

Parker Pens write smooth as glass for the 14k gold pens are pointed with hardest iridium. And the Parker Spear Head Ink Controller never allows any blotting or skipping.

PARKER

LUCKY CURVE

FOUNTAIN PEN

Standard Style Parker Lucky Curve Fountain Pens, $1.50 to $250.00, according to size and ornamentation.

New Parker Jack Knife Safety Pen

won't leak in *any* position. Carry it upside down in pocket of your white vest. Pen knife size for lady's purse. Prices $2.50 up.

New Parker Disappearing Clip

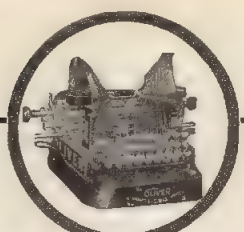
grips like a snapping turtle, but slides back into its shell when you want to write.

Dealers sell Parkers on 10 days' trial. If unsatisfactory, your money quickly refunded.

If your dealer doesn't keep Parkers, send us his name. We'll send you catalog and fill your order direct. *Do it today.*

Parker Pen Company, 106 Mill St., Janesville, Wisconsin

New York Retail Store
11 Park Row *Opposite Post Office*



Rent 10 Months Then It's Yours!

This Is the Offer That Has Astounded the Typewriter World! A stupendous and far-reaching inducement to encourage the use of typewriters.

The Famous Model No. 3 Oliver

Visible Writer—fully equipped just as perfect as though you paid cash—you get every perfection, every device, which ever went out with this model—you get **all** the extras, metal case, base-board, tools, instruction book, etc. -guaranteed flawless.

The machine with the type bars that strike downward—that has made the "write-in-sight" principle mechanically practical. It is so simple children learn to operate it in ten minutes It is faster than the fastest expert—possesses phenomenal strength and durability

No Cash Until You See It—until you try it in your home or office, then you make your decision -no salesman to influence or hurry you if you keep it you pay only one month's rent down: it will earn its own way thereafter

Stop Paying in 10 Months -no interest—no chattel mortgage—no collectors—no publicity—no delay. Positively the best typewriter value ever given—the best selling plan ever devised

If You Own a Typewriter Now—trade it in as part payment—we will be liberal with you. If you are renting an old typewriter, you will want to send it back when you see this one.

Send your name and address on coupon and we will tell you more about this unusual offer—more about this splendid typewriter—it won't cost you anything and you will be under no obligation -we won't send a salesman. Tear out the coupon now.

Typewriters Distributing Syndicate
166 U T North Michigan Blvd., Chicago

COUPON (95)

Typewriters Distributing Syndicate,
166 U T North Mich. Blvd., Chicago:

Without placing me under any obligation, send further information of typewriter offer.

Name

Address

My old machine is a . No. .

Get Your Canadian Home From the Canadian Pacific

The Home Maker

THE richest virgin soil is waiting for you in Manitoba, Saskatchewan and Alberta. Go where you can prosper, earn a farm home in a few years—farmers have paid for their farms with one crop First prize of $1000.00, for best wheat in the world, was awarded by American judges, at the New York Land Show, to a western Canadian farmer. Anyone can own land in Western Canada

Land from $10 to $30 an Acre
Ten Years in Which to Pay

The Canadian Pacific Railway offers you the finest irrigated and non irrigated land along its lines. Land adapted to grain growing, to poultry raising, dairying, mixed farming, and cattle, hog, sheep and horse raising Select your own land Decide what kind of farming you want to follow, and let the Canadian Pacific Railway put you on the road to fortune

To settlers having sufficient farming experience and equipment, the Canadian Pacific will loan money for a period of ten years at 6% for the purposes of erecting buildings and completing the improvements on their newly purchased Western Canadian farms. Ask for our handsome illustrated books on Manitoba, Saskatchewan and Alberta—mention the one you wish. Also maps, with full information, free. Write today.

S. C. THORNTON, Colonization Commissioner

Canadian Pacific Railway
Colonization Department
112 W. Adams Street, Chicago

FOR SALE:- Town lots in all growing towns
Ask for information, concerning unusual and business openings in these towns.

PHYSICAL CULTURE for THE FACE

Beauty by Exercising Facial Muscles

Every Woman Knows that Physical Culture restores youthful outlines and health to the body. Kathryn Murray, after ten years study, has perfected a scientific system of Facial Physical Culture which restores youthful expression, contour and healthy freshness to the Face in the same marked degree. This system remedies, removes and prevents

Lines on Forehead
"Crow's Feet," etc.
Drawn Down Features
Sagging Cheeks
Drooping Mouth Corners
Double Chin
Hollows in Cheeks and Neck
Withered and Yellow Necks
Flaccid or Wasted Tissues
Congested, Muddy Complexion (By invigorated circulation)
Undeveloped Muscles

Miss Murray's Book, "Face and Figure," tells how young women can rejuvenate and preserve, and older women restore, facial beauty No one is too old to benefit. This book also describes Splendid New Physical Culture Course for the Body. Write for it today. FREE!

KATHRYN MURRAY, Dept. C-10, 417 S. Dearborn St., Chicago

The Skeptical Night-Watch

"I always like to see you work late," said the night-watchman, "for of all the men in this building you give me the best cigars. Mighty good, but too costly a smoke for me."

"But you smoke cigars," protested the Treasurer. "What kind?"

"Just nickel ones."

"So do I," said the treasurer, but the doubting night-watch grinned knowingly as he banged the elevator doors.

He couldn't see how a cigar as good as my Panatela could be made and sold for 5 cents. That I can do so is because of my selling plan—selling direct to smoker, by mail.

I make my Panatela along with 16 other cigars here in Philadelphia in the cleanest factory I know of. The filler is clear, long Havana—grown in Cuba—and the wrapper is genuine Sumatra—grown in Sumatra. The cigar is hand-made by skilled adult men cigar makers. Yet I sell this acknowledged 10 cent cigar of the trade for Five Dollars per hundred, because by selling direct to the smoker I save selling expense.

SHIVERS' PANATELA
EXACT SIZE AND SHAPE

My plan is simply this unconditional offer:

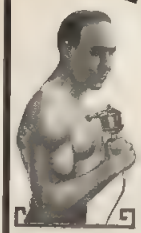
I will, upon request, send fifty Shivers' Panatelas on approval to a reader of the Cosmopolitan, express prepaid. He may smoke ten cigars and return the remaining forty at my expense, and no charge for the ten smoked if he is not pleased with them; if he is pleased, and keeps them, he agrees to remit the price, $2.50, within ten days.

In ordering state whether you prefer mild, medium or strong cigars and enclose business card or give reference.

If you prefer some other shape I shall gladly send you a catalog showing all my cigars.

HERBERT D. SHIVERS

913 Filbert Street Philadelphia, Pa.



POWER for YOU!

Power from within! Strength that is *more* than mere muscular strength—the strength of perfect health, abundant nerve force—now within your own reach through ***Vibration!*** Nine people out of every ten are only ***half alive!*** Are you? Listen—

All the Exhilarating Joys of Life-Strength-Youth

may be returned to you through ***Vibration. For Vibration is Life itself.*** It will chase away the years like magic. Every nerve, every fibre in your whole body will fairly tingle with the force of your own ***awakened power!*** Stagnation simply cannot exist. You are made over new from head to foot. ***All the keen relish, the pleasures of youth,*** fairly throb within you. Your blood is sent bounding through every vein, energy courses regularly. All the poisonous matters in your system are ***washed away.*** Every organ is put in ***perfect working order.*** Your self-confidence, ***your self-respect*** are increased a hundred fold. Yes, Vibration will do all this and more, ***much more.*** And it can do it in your own home. You can enjoy its wonder-working powers right at home, right in the privacy of your own room. You can give yourself the same identical treatments which you would receive in the offices of the world's most famous specialists—all without extra charge.

The White Cross Electric Vibrator

is the result of years of work and experiment. It is absolutely perfect. If you have your house wired for electricity, you can connect it up as easily as an electric lamp; if not, it will run perfectly on its own batteries.

Special Offer for a Limited Time

For a short time only we are making a remarkable Special Introductory Offer on the White Cross Electric Vibrator—amounting to thousands of dollars—actual rock-bottom prices direct to you. ***If you act at once.***

FREE BOOK Sign the coupon and mail it to us today. Get our splendid big FREE book telling you all about the marvels of ***Vibration.*** Read what scientists say about it. Post yourself on what it will do for you. Learn all about the ***White Cross Electric Vibrator*** and our limited offer. You are under no obligations at all—all you need to do is to send the coupon ***today***—you can send a postal card or a letter, but the coupon will do just as well.

SEND FOR THIS BOOK

Lindstrom, Smith Co.
218 S. Wabash Av.
Desk 1047
Chicago, Illinois

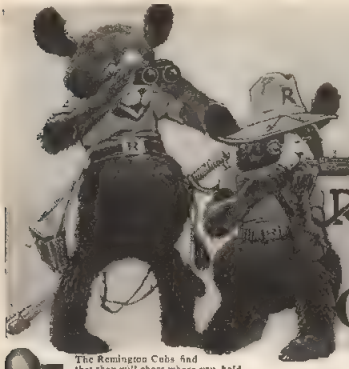
Without any obligations on my part, please send me, free and prepaid, your free book on Vibration, full particulars of the White Cross Vibrator and your Special *60-Day* offer.

Name .....

Address .....

WRITE PLAINLY

Lindstrom-Smith Co.
218 S. Wabash Av.
Desk 1047
Chicago, Ill.



REMINGTON UMC

Rifle and Pistol METALLIC CARTRIDGES

The Remington Cubs find that they will shoot where you hold.

Shoot to Hit

More—Their Use Guarantees the Life—the Continued Accuracy of Your Gun.

96 years of gun-making—50 years of cartridge-making have taught us

To make cartridges noted for straight-shooting—hard-hitting—sure-fire. To attain *ammunition accuracy* without impairing *gun accuracy*. To make for each kind of arm the cartridge it requires to *shoot* its *best*—and to keep *shooting* its *best*.

There is a ***Remington-UMC*** cartridge specially made for *your* rifle—*your* pistol. Every ***Remington-UMC*** cartridge is tested in the arm for which it is made.

Our Guarantee is behind these cartridges—and behind any standard arm, to the full extent of the maker's own guarantee, when these cartridges are used.

Shoot the cartridges that shoot straight. Shoot the cartridges that keep your gun shooting straight. Shoot ***Remington-UMC*** cartridges.

Remington-UMC Hollow Point Cartridges in several calibres for various makes of arms are unequalled in shocking power—they cost only a trifle more.

Remington Arms-Union Metallic Cartridge Co.

299 Broadway **New York City**

MAKE MONEY HERE — LEARN the NEW WAY

AGENTS! DROP DEAD ONES. AWAKE! GRAB THIS NEW INVENTION! THE 20th CENTURY WONDER AGENTS!

Get started in an honest, clean, reliable, money-making business. Sold on a money-back guarantee

World's magical gift realized by this new invention. The BLACKSTONE WATER POWER VACUUM MASSAGE MACHINE for the home. No cost to operate. Lasts lifetime. Price within reach of all. No competition. New field. New business. That's why it's easy. Removes blackheads, wrinkles, rounds out any part of the face or body and brings back Nature's beauty. Endorsed by leading doctors and masseurs. Listen Parker, Okla., sold 4. "5 orders first day." Margwarth, Pa., wrote, "I am making $19.00 per day." Shea, First order 12, second 36, third 72. Sharmenhorn, Ia., orders eight dozen machines first month. Shaffer, Va., "opening 4 out of 5 demonstrations." Vaughn, Wash., orders one dozen. Four days later wires, "Ship 6 dozen by first express." Spain, Texas, started with sample. Orders rushed, then 2 dozen, next 3 dozen. Lewis, Ind., sells 8 machines first hour. Says "Best article he ever saw for merit and money-making." No experience necessary. Territory with protection given free to active workers. Nothing in the world like it. Most wonderful article ever invented. We own all U. S. and foreign patents. Big book explained. "The Power and the Love of Beauty and Health" Free. Investigate now, today. A postal will do. A big surprise awaits you. Address

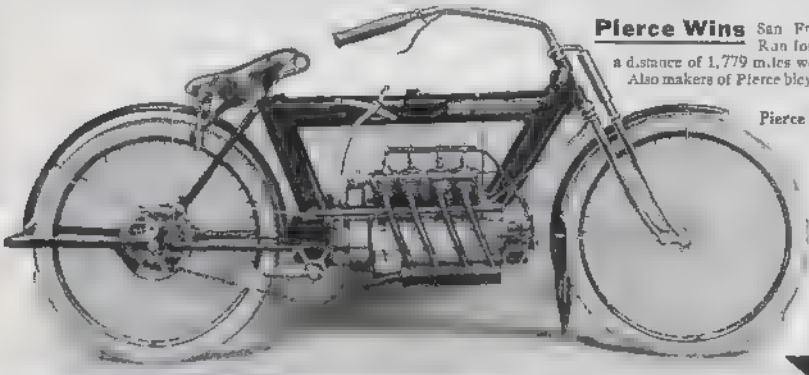
BLACKSTONE MF'G. CO.

527 Meredith Bldg., TOLEDO, O.

99E

PIERCE MOTOR CYCLES

THE life of a motorcycle is in its frame and engine. Compare the strong, dignified lines of the Pierce with any other motorcycle. ¶ The PIERCE FOUR CYLINDER is the only two-speed, shaft-driven motorcycle made. Some of the other distinctive features are: the large tubing frame, no separate tanks, free engine clutch, mechanical valves, two brakes, simple control, and magneto ignition. No noise and no vibration. ¶ We also manufacture Single Cylinder Models. In efficiency, speed, and hill-climbing as well as in every detail of design and construction, they are superior to all other singles and only surpassed by our own four cylinder.

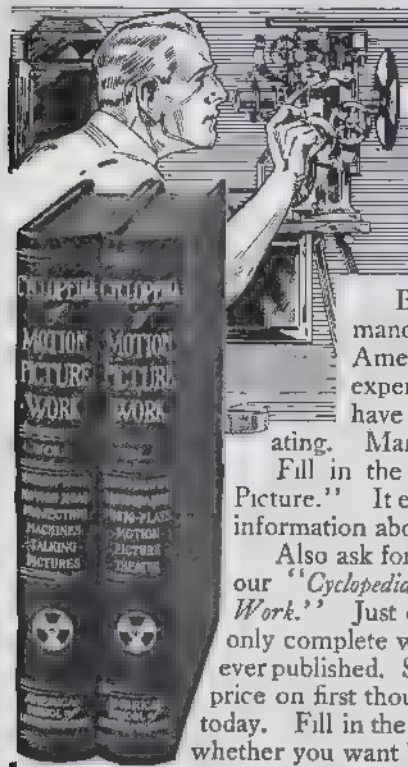


Pierce Wins San Francisco Elimination Contest. Run for five days and five nights for a distance of 1,779 miles won by a Pierce Four Cylinder. Also makers of Pierce bicycles, famous for over 20 years.

Pierce Motorcycle catalogue "T.E." on application.

The
Pierce Cycle Co.
BUFFALO, N. Y.

Pacific Coast Branch
OAKLAND, CAL.



BE AN EXPERT MOVING PICTURE OPERATOR
MAKE FROM $22 TO $30 PER WEEK

Big pay and short hours in this paying profession. The demand for expert motion picture operators is increasing daily. The American School of Correspondence will teach you to be an expert operator in a few weeks, without loss of time. Even if you have a good job now it will pay you to learn motion picture operating. Many operators are making "a little extra" in their spare time. Fill in the coupon and we'll send you our booklet "The Motion Picture." It explains our motion picture course fully—gives some valuable information about operating.

Also ask for information about our *"Cyclopedia of Motion Picture Work."* Just off the press—the only complete work on this subject ever published. Special introductory price on first thousand—ask about it today. Fill in the coupon, specifying whether you want books or course.

AMERICAN SCHOOL OF CORRESPONDENCE, CHICAGO, U. S. A.

The American School of Correspondence
Chicago, U. S. A.

Please send me further information about your
( ) Motion Picture Course.
( ) Cyclopedia of Motion Picture Work.

NAME . . . . . .

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BIG COMMISSIONS FOR AGENTS

Technical World Magazine pays liberally for new subscriptions. Its inducements to new subscribers are most attractive. *Write to-day for full particulars of our terms to agents.*

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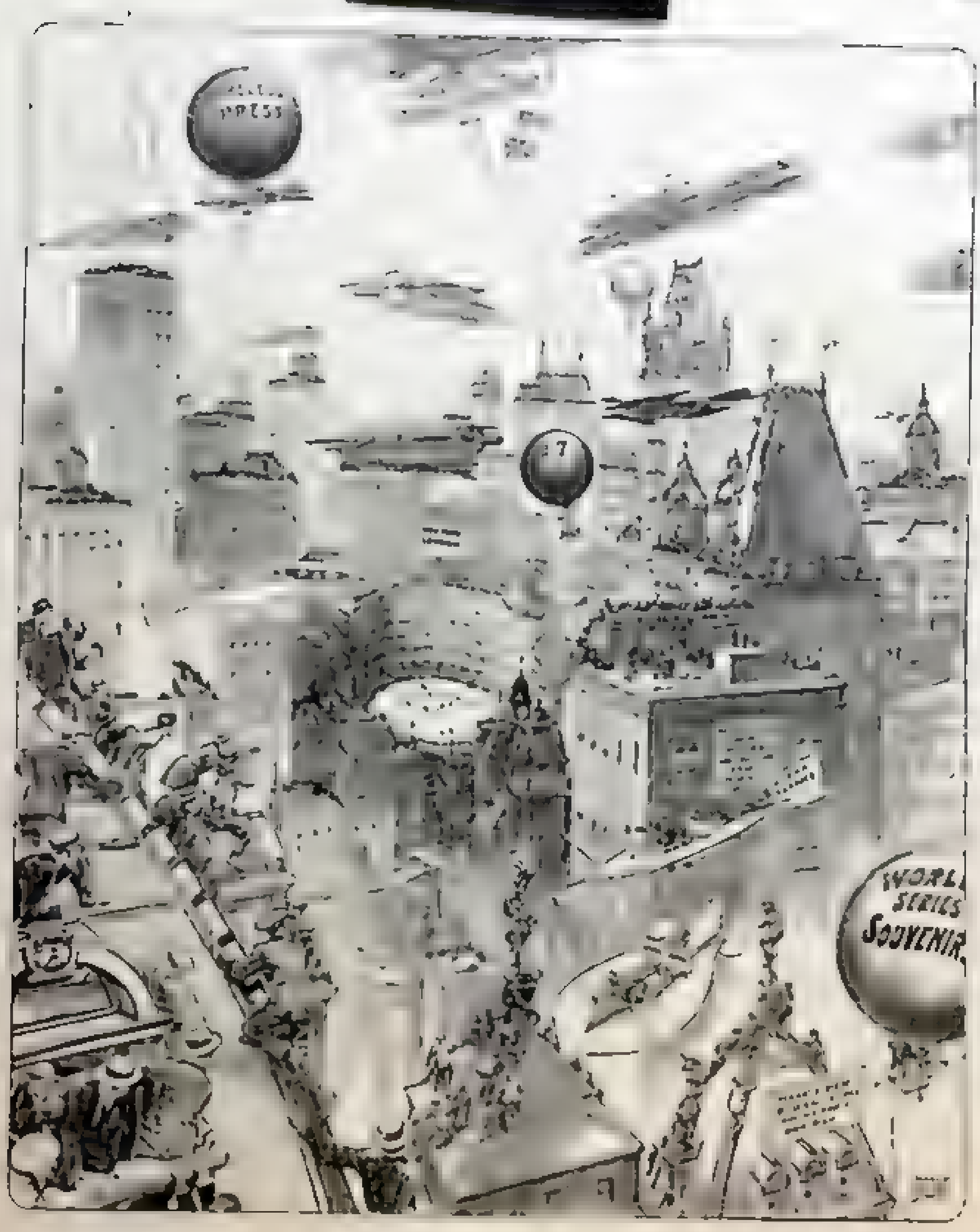


MAY WE ALL LIVE TO SEE IT

THEATRE
AD
THEATRE

DOLLS

THAT ILLUSTRATE HISTORY

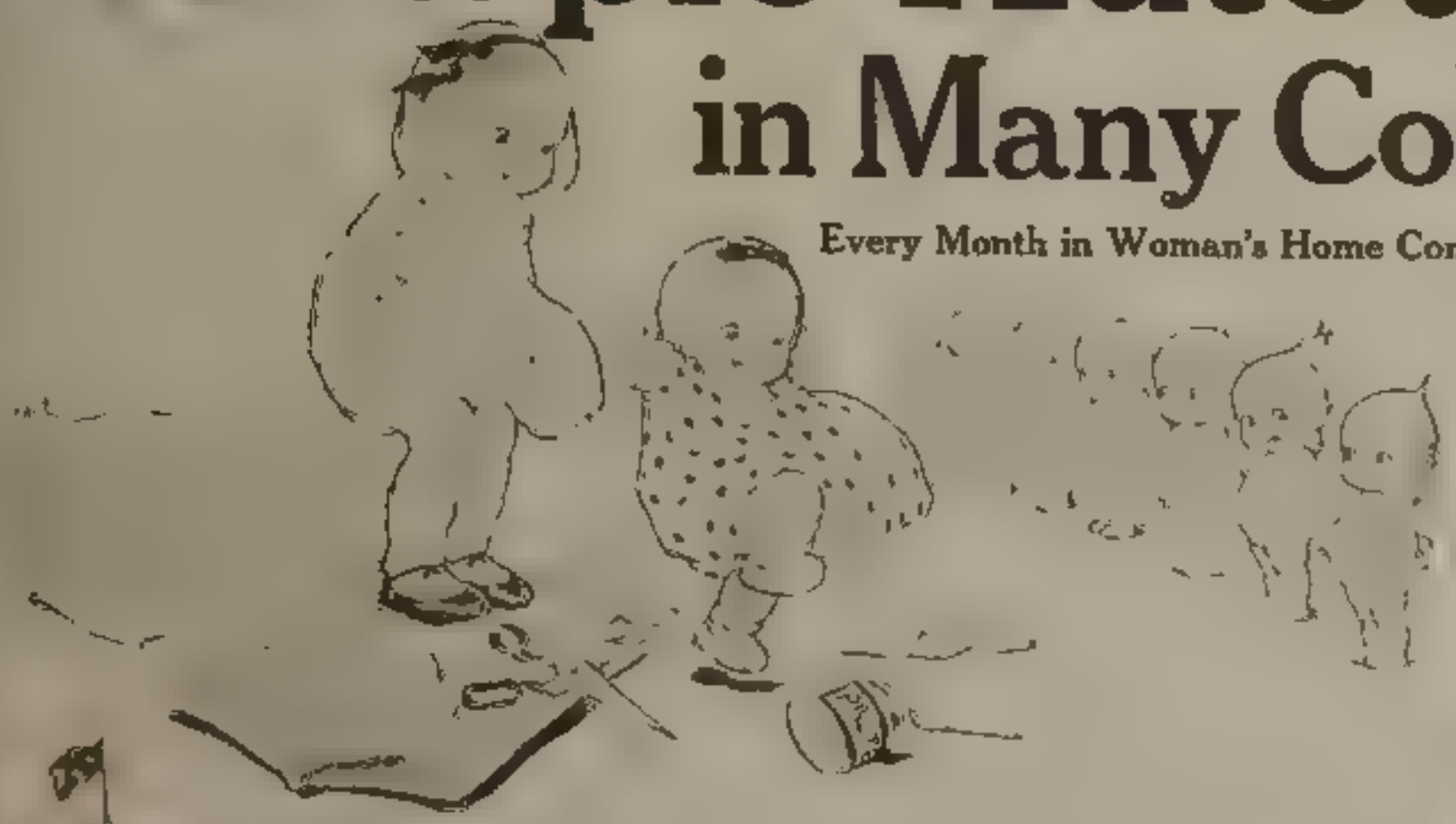
By Elizabeth Dryden

MADAME RIERA'S dolls

This page is for Children

Kewpie Kutouts in Many Colors

Every Month in Woman's Home Companion



Wag, the Chief

THE Kewpies were invented by Rose O'Neill. They are always doing good, helping Dotty Darling and her Baby Brother to have a good time whenever the older children won't let them tag along. Now all the children want to cut out the Kewpies. And the Kewpies want to be cut out by the children. So Rose O'Neill has made the Kewpie Kutouts. There is a whole page of them for you in the October copy of the Woman's Home Companion—a magazine with pages and pages for children and their mothers.

Wag the Chief—his back

This is Wag the Chief. He is captain of the band of Kewpies—not have been making it so pleasant for Very Little Folks, while mothers take the Woman's Home Companion. When you cut him out and paste him together, he makes a real Kewpie whichever way you look at him. In October Woman's Home Companion you will find Wag in color (not plain black and white like he is here) and Dotty Darling (with two dresses), and Dotty's Baby Brother all ready to be cut out.

Dotty Darling is over five inches high in the Kewpie Kutout

Dotty's Baby Brother is not quite so tall as Dotty, because he is younger.

A circus story about Dotty Darling and her Kewpies has a page all to itself opposite the Kewpie Kutouts.

The Kewpies are the first cut outs to have real backs

Ask your Mother for 15 cents

—then hurry to a news-stand and buy the October Woman's Home Companion which has the first of the Kewpie Kutouts, or send the 15 cents to us right away with your name and address on the Kewpie Kupon. We will send you by return mail the October Woman's Home Companion, postage paid.

"Use this Kupon"

Woman's Home Companion
381 Fourth Ave., New York

[illegible]

WOMAN'S HOME COMPANION

at 381 Fourth Avenue, New York

BANNER WATCH ASSORTMENT

Watches to Retail at $1.00, 1.25, 1.50 2.00 and 2.50 Each; Every Watch Unconditionally Guaranteed

The Most Successful Scheme yet devised for displaying Watches in a manner that will attract attention and result in sales, the Display Board is veneered to prevent Warping and is Covered with Blue Plush, against which the Watches present a very attractive appearance; we have selected an Extra Fine Grade of Plush to prevent fading, as far as possible, when the Assortment is displayed in the Show Window. Our Entire Line of the Correct Time Co.'s Watches (8 different kinds in Assorted Finishes) is displayed on the Board and enough space is left for putting in special prices, if desired to run a sale of these Watches

Considering the rapid growth of the Watch Business with the average retailer—although this may be more than the dealer has been in the habit of buying in one order, we feel it will prove a paying investment as the variety display is bound to attract more attention, than if a few watches were displayed in a show case There are Brass Cup Hooks to hang the Watches on the Board.

Contents of Banner Assortment

Quantity		Retail Each	Total Retail
6 Only	No. 100—**Skookum** Watches, Nickel Finish	$1.00	$6.00
3 Only	No. 101—Skookum Watches, Gun Metal Finish	1.00	3.00
3 Only	No. 102—Skookum Watches, Gilt Finish	1.00	3.00
6 Only	No. 103—**Hartford** Watches, Nickel Finish	1.25	7 50
3 Only	No. 105—Hartford Watches, Gun Metal Finish	1.25	3 75
3 Only	No. 107—Hartford Watches, Gilt Finish	1.25	3 75
Only	No. 115—**Gold Bond** Watches Nickel Finish	1.50	4.50
3 Only	No. 118—Gold Bond Watches, Gun Metal Finish	1.50	4.50
6 Only	No. 121—Gold Bond Watches, Gilt Finish	1.50	9 00
6 Only	No. 109—**Ford** Watches, Nickel Finish	1 25	7 50
3 Only	No. 112—Ford Watches, Gun Metal Finish	1 25	3 75
3 Only	No. 114—Ford Watches, Gilt Finish	1.25	3.75
4 Only	No. 124—**C. T. C.** Watches, Nickel Finish	2.00	8.00
4 Only	No. 126—C. T. C. Watches, Gun Metal Finish	2.00	8.00
4 Only	No. 128—C. T. C. Watches, Gilt Finish	2.00	8.00
4 Only	No. 130—**Aristocrat** Watches, Nickel Finish	2.50	10 00
4 Only	No. 132—Aristocrat Watches, Gun Metal Finish	2 50	10 00
4 Only	No. 134—Aristocrat Watches, Gilt Finish	2.50	10 00
4 Only	No. 136—**Martha Washington** Watches, Nickel Finish	2.50	10 00
4 Only	No. 138—Martha Washington Watches, Gun Metal Finish	2.50	10 00
4 Only	No. 140—Martha Washington Watches, Gilt Finish	2.50	10.00
4 Only	No. 142—**George Washington** Watches, Nickel Finish	2.50	10.00
4 Only	No. 144—George Washington Watches, Gun Metal Finish	2.50	10.00
4 Only	No. 146—George Washington Watches, Gilt Finish	2.50	10.00
	Total Retail Price		$174.00

1 Only Display Stand, Free of Charge

Per Assortment

No. 714—**Assortment** Contains 96 Watches Eight different kinds in Assorted Finishes, each one **Unconditionally Guaranteed**; 48 Watches can be displayed on the Board at one time, and as the different Numbers are sold they can be replaced from Stock and the Assortment will always look Complete and Attractive, the Board is 36 in. High and 12½ in. Wide, Covered with Best Quality Blue Plush; Easel Back; Plush Covered Feet $174 00

Weight 11 Lbs. per Assortment

CORRECT TIME CO. WATCH ASSORTMENT

Watches to Retail at $1.00, 1.50, 2.00 and 2.50 Each; Every Watch Unconditionally Guaranteed

We have selected some of Our Most Attractive Watches and those which have proven Best Sellers for this Assortment; The Case will Display 18 Watches and will be an Ornament to any store either large or small; the Watches are hung in three rows to display a Gun Metal, Nickel and Gilt Finish in each kind of Watch, the Name and Reta Price of each Watch is Printed at the Bottom

CORRECT TIME CO.

This Display Case was selected from many samples sent us to choose from, as the most Practical and Neatest Case made; It locks securely in the Back and in addition there are Extra Catches on both sides to hold same firm; even if the Case is not locked it must be turned completely around to be opened, so there is small chance of the Watches being stolen

Per Assortment

No. 715—Assortment Contains 72 Watches Complete with a Handsome Display Case 15½ in Long 12 in Wide, 9½ in High at Back and 3 in High at Front, the Top is Plate Glass, with Green Plush Drawer for Surplus Stock and Empty Boxes $138.00

Weight 10 Lbs per Assortment
Contents of C. T. C. Assortment

Quantity		Retail Each	Total Retail
6 Only	No. 100—**Skookum** Watches, Nickel Finish	$1.00	$6.00
3 Only	No. 101—Skookum Watches, Gun Metal Finish	1.00	3.00
3 Only	No. 102—Skookum Watches, Gilt Finish	1.00	3.00
3 Only	No. 115—**Gold Bond** Watches, Nickel Finish	1 50	4.50
3 Only	No. 118—Gold Bond Watches, Gun Metal Finish	1.50	4.50
6 Only	No. 121—Gold Bond Watches, Gilt Finish	1.50	9.00
4 Only	No. 124—**C. T. C.** Watches, Nickel Finish	2 00	8.00
4 Only	No. 126—C. T. C. Watches, Gun Metal Finish	2.00	8.00
4 Only	No. 128—C. T. C. Watches, Gilt Finish	2 00	8.00
4 Only	No. 142—**George Washington** Watches, Nickel Finish	2.50	10.00
4 Only	No. 144—George Washington Watches, Gun Metal Finish	2.50	10.00
4 Only	No. 146—George Washington Watches, Gilt Finish	2.50	10.00
4 Only	No. 136—**Martha Washington** Watches, Nickel Finish	2.50	10 00
4 Only	No. 138—Martha Washington Watches, Gun Metal Finish	2.50	10.00
4 Only	No. 140—Martha Washington Watches, Gilt Finish	2.50	10.00
4 Only	No. 130—**Aristocrat** Watches, Nickel Finish	2.50	10.00
4 Only	No. 132—Aristocrat Watches, Gun Metal Finish	2.50	10.00
4 Only	No. 134—Aristocrat Watches, Gilt Finish	2.50	10.00
	Total Retail Price		$144.00

WATCH ASSORTMENT

This Assortment Contains 11 of our most popular and best selling Watches in various Finishes, on a nice Velvet Covered Plaque, Size 10½x12 in., with Easel Back; the Watches all bear our regular guarantee and as fast as sold, new ones can be put in their place; the selling price of each is plainly printed, as well as the name of each Watch.

The Martha Washington is full 6 Size, Stem Wind and Stem Set, and is perfectly smooth; It has Snap Back and Bezel; Porcelain Dial with sunken Second Hand and the Face is plainly marked.

The George Washington is full 14 Size, Stem Wind and Stem Set and is beautifully Engraved; It has Snap Back and Bezel, Porcelain Dial and sunken Second Hand; Each Watch is carefully tested at the Factory.

The Jefferson is full 12 Size, Stem Wind and pull out Pendant Set; the "Knife Edge" thin Case, gives it the appearance of a high priced Watch

Per Assortment

No. 717—Assortment Contains 11 Watches, as described above..... $38.60

One Assortment in a Box; Weight 2¾ Lbs. per Assortment

Contents of Assortment

Martha Washington	George Washington	Jefferson
1 Gun Metal	1 Gun Metal	1 Gun Metal
1 Nickel Plated	2 Nickel Plated	2 Nickel Plated
1 Gilt Finish	1 Gilt Finish	1 Gilt Finish
Retail Price, $2.50 Each	Retail Price, $2.50 Each	Retail Price, $3 00 Each

CHILDRENS' AUTOMOBILES

The chief delight of a Child is to imitate grown ups and we know of no other form of amusement so conducive to pleasure and health as the use of these Miniature Automobiles; The benefits of outdoor exercise are multiplied when the child derives real pleasure from his exertions.

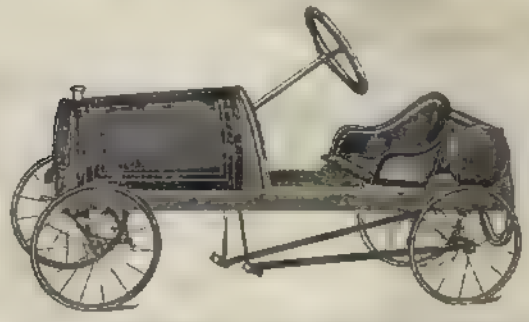
PIERCE ARROW

Body is made of Sheet Steel and Hard Wood, Handsomely Painted and Striped in Attractive Colors; the Wheels and Running Gear are Finished in Black Baked Enamel.

Each

No. 50—Size of Body 14x30 in.; Diam. of Front Wheels 10 in., Rear Wheels 14 in., with ½ in. Rubber Tires.....$9 00
One in a Crate; Weight 35 Lbs.

No. 49—Junior; Body 13x28 in.; Black Enameled Wheels, Front 8 in., Rear 12 in.; Fitted with ⅜ in. Rubber Tires. .. $8.00
One in a Crate; Weight 30 Lbs.



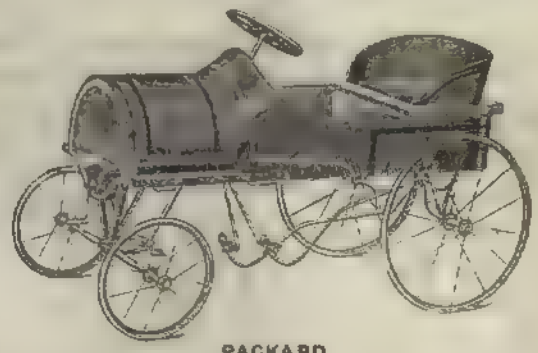
BARNEY OLDFIELD RACER

This Style appeals to boys who have the racing instinct, as it is really a Miniature Racing Car; Body is made of Sheet Steel and Hardwood, Finished in Combination Blue and Red, Striped in Black and Gold; Gears and Wheels are Finished in Black Baked Enamel; Seat is Leatherette Upholstered.

Each

No. 52—Size of Body 14½x48 in.; Diam. of Front Wheels 14 in., Rear Wheels 14 in., with ⅝ in. Rubber Tires; 12 in. Wood Rim Steering Wheel; Gasoline Tank on Rear, with Two Extra Tires.....$15.00
One in a Crate; Weight 80 Lbs. Each

No. 53—Size of Body 13x43 in.; Diam. of Wheels 12 in., with ⅝ in. Rubber Tires; 6 in. Wood Rim Steering Wheel; Gasoline Tank on Rear 13.00
One in a Crate; Weight 50 Lbs Each



PACKARD

Body is made of Sheet Steel and Hardwood, Handsomely Painted and Striped in Attractive Colors; the Wheels and Running Gear are Finished in Black Baked Enamel.

Each

No. 51—Size of Body 15x36 in.; Diam. of Front Wheels 10 in., Rear Wheels 16 in., with ½ in. Rubber Tires.....$10.00
One in a Crate; Weight 48 Lbs. Each

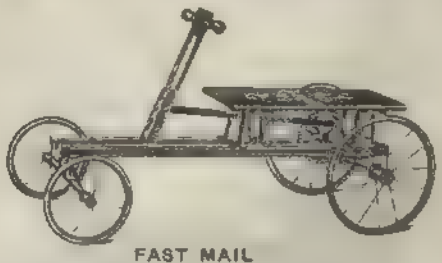
ROCKET

Body made of Well Seasoned Wood with Sheet Metal Front Finished Special Auto Red, Striped in Bronze, Green Panel; Seat is Hinged and Adjustable; Body Nicely Stenciled; Gears and Wheels Enameled Green; Starting Crank, License Tag and Front Apron Gear, Front and Rear Axles, Steering and Driving Gears and Wheels made of Steel.

Each

No. 476—Size of Body 15x36½ in.; Diam. of Front Wheels 12 in., Rear Wheels 18 in., with ½ in. Rubber Tires.....$9.00
One in a Crate; Weight 45 Lbs. Each

CHILDRENS' HAND CARS



FAST MAIL

Equipped with Latest Improvements

Protected Gears prevent injury to Rider or Clothing; Wheels have Tangent Spokes; Machine is Geared for Speed; No Chain or Ratchet to cause trouble; For Children from 3 to 12 years old.

Each

No. 2—Hardwood Frame; Length Over-all 41 in.; Painted Red; Size of Seat 9x20 in., Painted Green; Attractively Striped and Varnished; Grips are Black Enameled; 8 in. Front Wheels, 12 in. Rear Wheels, Tinned; ½ in. Rubber Tires.$8.00
One in a Crate; Weight 40 Lbs. Each

BADGER

Made entirely of Wrought Steel and Malleable Castings, except the Seat Board which is Hardwood firmly Bolted to Frame; It embodies all the essential features in an article of this nature—strength, light weight, minimum number of parts and easy running.

Each

No. 3—Junior, for Children, 3 to 7 years; Length Over-all 28½ in.; Seat Board 7x12 in.; Black Enameled Handle Bar Grips, with Brass Ferrules; Black Enameled Wheels, Diam. of Front 8 in., Rear 10 in.; Fitted with ½ in. Rubber Tires..$6.00
One in a Crate; Weight 25 Lbs. Each

No. 4—Senior, for Children, 4 to 12 years; Length Over-all 36 in.; Seat Board 9x16 in.; Black Enameled Handle Bar Grips, with Brass Ferrules; Black Enameled Wheels, Diam. of Front 8 in., Rear 10 in.; Fitted with ½ in. Rubber Tires.. 7.00
One in a Crate; Weight 30 Lbs. Each

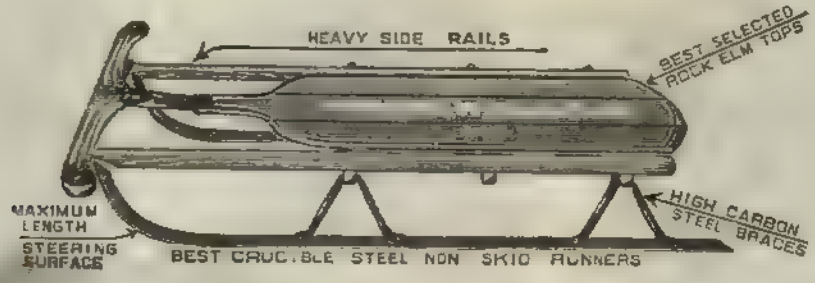
MARSWELLS STEERING SLEDS

The Ideal Coasting Sled, as it can be guided to the right or left at will, thus answering the purpose of a double or bob sled

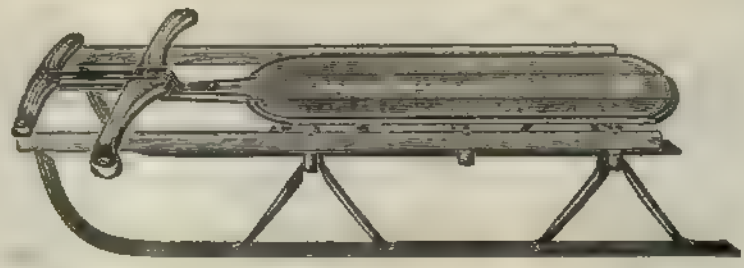
This Sled is controlled with the Greatest Ease and is a Prime Favorite with either boy or girl on account of the Ease with which it can be steered around Teams or other Obstacles; it has the Greatest Lateral Curve with the least Friction and there is absolutely no lost motion as the Sled responds quickly to the touch of the Guiding Bar; there is no digging of heels or toes into the road, hence no wearing out of shoes.

The Runners are made of T shaped spring Steel, strong and rigid vertically and are Steel Braced (See Illustrations below) in the most thorough manner; the Braces are Steel and are riveted to both the Runner and the Cross Pieces and can never become loosened.

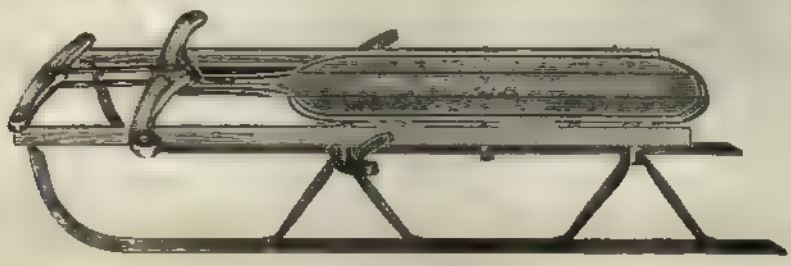
The Frame and Top are made of the Best Grade of Hardwood, Natural Finish and Stenciled in Bright Colors; The Runners are Painted Red; the Finished Sled presents a very Handsome and Attractive Appearance.


HEAVY SIDE RAILS
BEST SELECTED ROCK ELM TOPS
HIGH CARBON STEEL BRACES
MAXIMUM LENGTH STEERING SURFACE
BEST CRUCIBLE STEEL NON SKID RUNNERS

	Per Dozen
No. M326—Carries One Child; Length 33 in., Width 11 in., Height 6 in.; Weight 90 Lbs. per Dozen	$8.00
No. M366—Carries One Child of Medium Size; Length 36 in., Width 12 in., Height 6 in.; Weight 102 Lbs per Dozen	11.00
No. M416—Carries One Grown Person or Two Children; Length 40 in., Width 13 in., Height 6¼ in.; Weight 115 Lbs. per Dozen	14.00



	Per Dozen
No. M406—Carries Two Large Children and is amply Strong enough for Two Grown Persons; Length 45 in., Width 14 in., Height 8¼ in., Weight 170 Lbs. per Dozen	$36.00



WITH FOOT RESTS

	Per Dozen
No. M527—Carries Two Grown Persons; Length 50 in., Width 14 in., Height 8½ in.; Weight 192 Lbs. per Dozen	$45 00

One-Sixth Dozen in a Bundle. We Do Not Break Bundles

WOOD HAND SLEDS

Frames and Tops are made of Best Seasoned Wood, Finely Finished, Painted and Decorated; Runner Shoes of Best Quality, Half Round or Flat Steel, firmly attached to Runner; All Metal Head Tips are Malleable Iron, Nicely Tinned, Braces are Tinned Steel

All Hardwood, Extra Fine Finish, Top Board Handsomely Painted and Decorated; Round Side Fenders, Securely Fastened to Runners by Knee Braces; Dragon Heads.

Per Dozen

No. 3615—Size 36x15 in., Three Bent Knees, Half Oval Shoes $24 00

Weight 72 Lbs. per Dozen

Natural Wood Finished Frame, Nicely Painted and Decorated Top; Steam Bent Knees, Tinned Dragon Heads

Per Dozen

No. 3612—Size 36x12 in.; Three Bent Knees, Half Oval Shoes $15 00

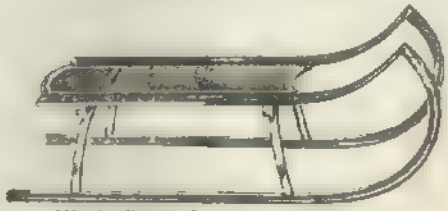
Weight 66 Lbs. per Dozen

Natural Wood Finished Frame; Nicely Painted and Decorated Top

Per Dozen

No. 3612A—Size 36x12 in.; Three Bent Knees, Flat Steel Shoes $9 00

Weight 54 Lbs. per Dozen



Nicely Painted and Decorated Top

Per Dozen

No. 336—Size 33x12 in.; Two Bent Knees, Flat Shoes.. $7 00

Weight 42 Lbs. per Dozen

All, One-Sixth Dozen in a Bundle; We Do Not Break Bundles

WOOD COASTERS

The Coasters illustrated on this page are favorites with boys throughout the Northwest. They are manufactured by a firm of long experience in this line. The materials used are the best for the purpose and each style is made to correct proportions. Their great strength and durability, combined with pleasing outline and finish make them ready sellers, and a profitable line for the Retail Dealer.

Per Dozen

No. 3714—Size 37x14 in.; Hardwood; Varnished Runners; Fancy Painted Top; Side Handles; Full Round Spring Shoes $12.00

One-Third Dozen in a Crate

Weight 94 Lbs. per Dozen

Per Dozen

No. 3710R—Size 37x11 in.; Hardwood; Nicely Varnished Runners, with Top Board Painted and Decorated; Hand Holes on Side; Full Round Spring Shoes $9.00

One-Third Dozen in a Crate

Weight 85 Lbs. per Dozen

We Do Not Break Crates

Per Dozen

No. 3711—Size 37x11 in.; Hardwood; Nicely Varnished; Top Board Painted and Decorated; Hand Holes on Side; Half Oval Shoes.....$7.00

One-Third Dozen in a Crate

Weight 85 Lbs. per Dozen

CHILDREN'S CUTTERS

The Bodies of Our Children's Cutters are made Extra Large to accommodate the Baby's Wraps; Note the large dimensions as given in descriptions

Hardwood Body, Handsomely Finished; Push Handle; 3 Bent Knees, 4 Bright Plated Bent Knee Braces and 6 Side Braces, 3 Heavy Cross Bars, Round Side Fenders with Brightly Polished Braces, Half Oval Shoes.

Each

No. 55—17x30 in Body, White Enamel Finish; Seat and Back Upholstered in Velours $10.00

One in a Crate; Weight 35 Lbs. Each

Hardwood Body, Handsomely Finished; Push Handle, 2 Knees well Braced, Round Side Fenders with Brightly Polished Braces, Half Oval Shoes.

Each

No. 22—16½x30 in. Body, Painted in Assorted Colors, Green, Red and Blue, Decorated; Not Upholstered.$4.50

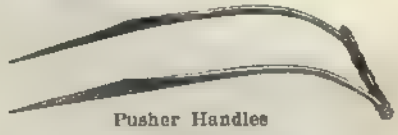
No. 26 16½x30 in Body, White Enamel Finish; Not Upholstered 4.75

No. 37—Same as above with Seat and Back Upholstered in Damask..... 6.50

One in a Crate; Weight 25 Lbs. Each

CHILDREN'S CUTTER BODIES AND PUSHERS

Bodies



Pusher Handles

BODIES Per Dozen

No. 1—13x26 in Hardwood, Painted Red and Decorated, Heavy Material, Securely Put Together; Not Upholstered $12 00

Half Doz. in Crate; Weight 144 Lbs. per Doz.

PUSHER HANDLES Per Dozen

No. 2 Hardwood, Striped and Varnished Side Pieces, Securely Mortised into Turned and Shaped Handle; 11 in. Wide and 30 in. Long..$4.00

Open Stock; Weight 15 Lbs. per Dozen

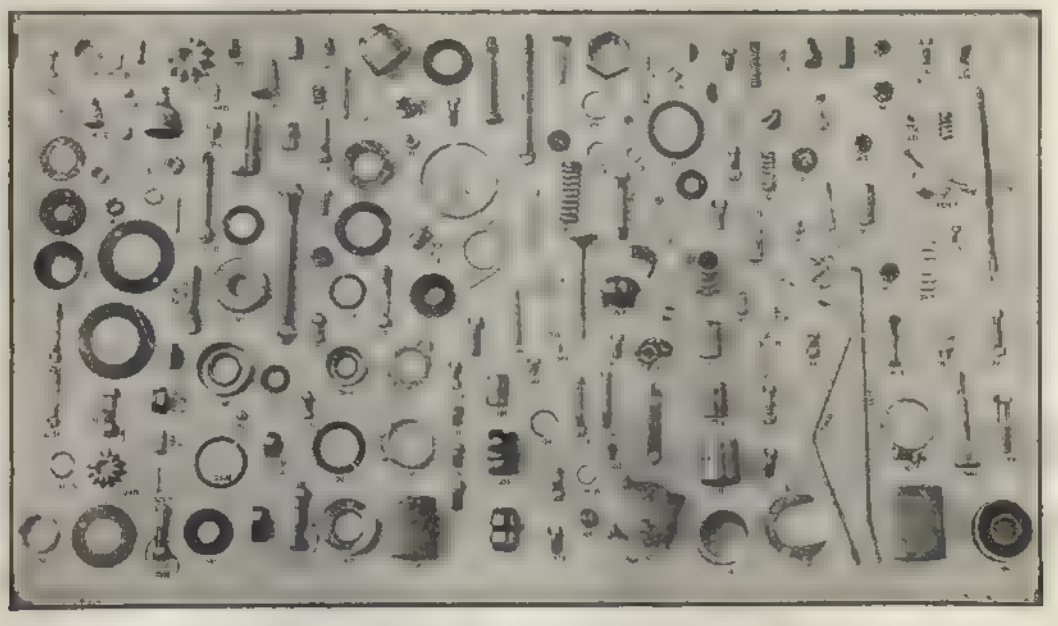
Marshall-Wells Hardware Co.

REPAIR PARTS FOR FORD CARS

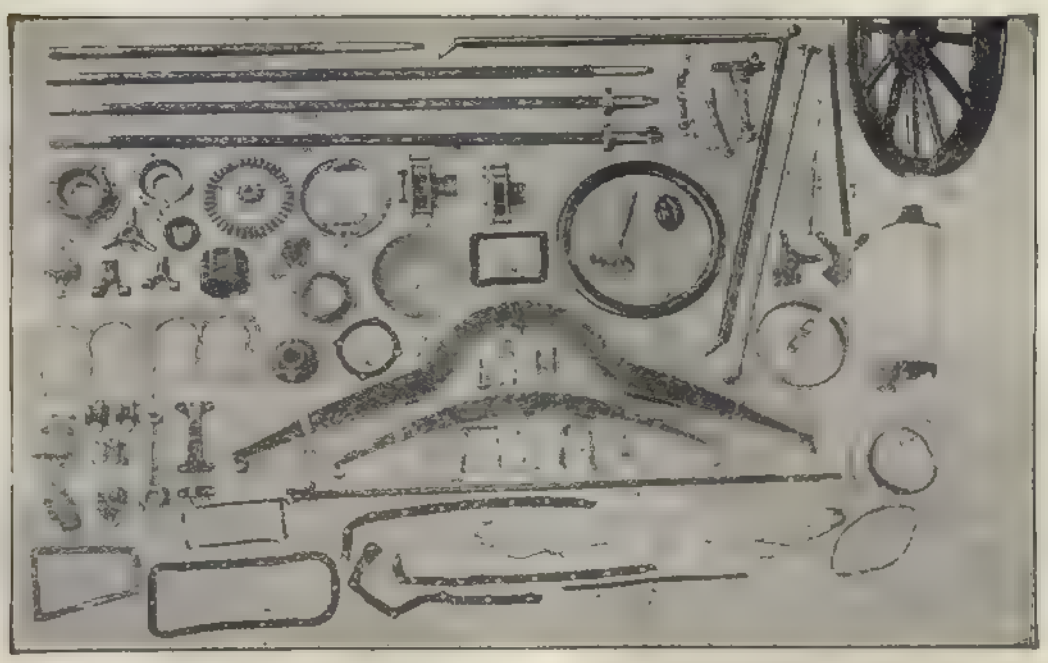
For Complete List of Parts and Prices, See Following Page

The Parts listed and illustrated on these pages are of a type that frequently become worn, are lost or require replacement for other reasons, We are prepared to furnish exact duplicates of these various Nuts, Bolts, Screws, etc., of the very best material, accurately machined and interchangeable with whatever part is to be replaced; the Numbers shown in our illustrations and as listed correspond with the standard Ford Part of the same Number.

Special attention is called to the fact that our Bushings and Bearings are made from a high grade bearing Bronze not Brass



See Following Page for Complete List of Parts and Prices; Order by Number and Name of Part Wanted



See Following Page for Complete List of Parts and Prices; Order by Number and Name of Part Wanted

REPAIR PARTS FOR FORD CARS

For Illustrations, See Preceding Page

	Each
No. 2503C—Axle Housing Bolt and Nut, 5/16x1 1/16 in	$0 05
No. 2503E—Axle Housing Bolt and Nut 5/16x1 9/16 in	.06
No. 2505D—Axle Shaft, Tapered, 1912-16, 30 in. Tread, 1 3/32x31 1/16 in.	1
No. 2506—Axle Shaft Washer, 1909-16, 1 1/32 in. Diam. Fibre	03
No. 2508—Axle Shaft Roller Bearing	
No. 2509—Axle Shaft Roller Bearing Sleeve, Right	
No. 2509B—Axle Shaft Roller Bearing Sleeve, Left	
No. 2510—Axle Housing Cap, 1909-16, 2 1/32 in. Diam	.05
No. 2510A—Axle Outer Roller Bearing Steel Washer, 1909-16, 2 1/32 in. Diam	.03
No. 2510B—Axle Outer Roller Bearing Felt Washer, 1909-16, 2 1/32 in. Diam	.05
No. 2512B—Differential Case, Left (includes Bushing), 1909-13	2.00
No. 2512C—Differential Case, Left (no Bushing used), 1914-16	1.40
No. 2513B—Differential Case, Right (includes Bushing), 1909-13	1.50
No. 2513C—Differential Case, Right (no Bushing used) 1914-16	.85
No. 2514—Differential Case Stud and Nut, 1909-16, 5/16x2 3/8 in	.05
No. 2514B—Differential Case Stud and Nut, 1915-16, 5/16x2 5/16 in	.05
No. 2517—Differential Case Bushing, Phosphor Bronze, 1909-13, 1 9/16 in. Bore, 1 11/16 in. Diam	.30
No. 2518—Differential Drive Gear, 1909-16, 40 Teeth	
No. 2519A—Differential Gear Lock Ring, 1909-16	.03
No. 2520—Differential Gear, 1909-16, 24 Teeth, Drilled for Pin	1.30
No. 2520B—Differential Gear, 1909-16, 24 Teeth, not Drilled for Pin	1.30
No. 2521B—Differential Gear Key, 1911-16, 1 3/8 in. Long	.05
No. 2522B—Differential Gear Pin, 1913-16, 1 3/8 in. Long	03
No. 2523—Differential Gear Thrust Washer, 1909-14, Fibre, 2 1/16 in. Diam	10
No. 2524B—Differential Pinion with Bushing 1911-14, 5/8 in. Bore, 12 Teeth	.50
No. 2524C—Differential Pinion, 1915-16, 12 Teeth (no Bushing)	.50
No. 2526B—Differential Spider with Bushing, 1911-16	.85
No. 2527—Differential Spider Bushing, Phosphor Bronze, 1909-16, 1 1/16 in. Bore	.20
No. 2528—Differential Thrust Plate, Phosphor Bronze, 1909-16, 3/4 in. Diam	.30
No. 2529—Differential Thrust Plate, 1909-16, 3/4 in. Diam. Steel	.10
No. 2530—Differential Thrust Plate Pin, 1909-16, 1 3/32 in. Long	03
No. 2531—Differential Thrust Plate Pin, 1909-16, 1/2 in. Long	03
No. 2532—Differential Housing Oil Plug, 1909-16, 3/4 in., 24 Threads	06
No. 2545B—Rear Axle Grease Cup, 1909-16, 1/8 in. Pipe Threads	10
No. 2548—Radius Rod Nut, 1909-16, 9/16 in., 18 Threads	05
No. 2549—Radius Rod Lock Nut, 1909-16, 9/16 in., 18 Threads	.03
No. 2550—Radius Rod Lock Washer, 1909-16, 9/16 in.	.01
No. 2551—Radius Rod Bolt and Nut, 1909-16, 1/2x1 1/2 in.	07
No. 2554—Ball Joint Support Bolt and Nut	
No. 2557—Hub Cam Shaft, Right, 1909-16, 3 1/4 in. Long	.20
No. 2558—Hub Cam Shaft, Left, 1909-16, 3 1/4 in. Long	.20
No. 2559—Hub Cam Shaft Bushing, Phosphor Bronze, 1909-16, 1/8 in. Bore, 1 1/16 in. Diam	.10
No. 2564—Lever Clevis Pin, 1909-16, 5/16x1 in.	.03
No. 2566—Hub Brake Shoe, 1909-16, Cast Iron	.70
No. 2567—Brake Shoe Support Bolt, 1909-16, 1/2x1 7/8 in.	07
No. 2568—Brake Shoe Support Nut, 1909-16, 1/2 in., 20 Threads	.06
No. 2570B—Brake Shoe Coil Spring, 1915-16, 3 1/4 in. Long	.03
No. 2571—Universal Joint Assembly 1909-16	2.25
No. 2572—Joint Knuckle (Male), 1909-16	.70
No. 2573—Joint Knuckle (Female), 1909-16	.80
No. 2574—Joint Knuckle Pin, 1909-16, 9/32x1 1/8 in.	0
No. 2575—Joint Ring, Complete, 1909-16, 5/8 in. Diam.	1.00
No. 2576—Joint Ring Rivets (per set of 4), 1909-16, 3/16x1 1/8 in.	.05
No. 2578—Joint Housing Plug, 1909-16, 1/8 in., 20 Threads	.05
No. 2579—Ball Joint Grease Cup, 1909-16, 1/8 in. Pipe Threads	.10
No. 2580—Ball Cap Gasket, 1909-16, Felt	03
No. 2583—D. S. Roller Bearing Housing, 1911-16, 1 1/32 in. Long	1.00

	Each
No. 2584B—D. S. Roller Bearing Stud and Nut, 1912-16, 1 3/32x1 5/8 in.	
No. 2585—D. S. Roller Bearing Housing Set Screw, 1911-16, 1/4 in., 20 Threads	06
No. 2587—D. S. Roller Bearing	
No. 2588—D. S. Roller Bearing Distance Piece, 1 1-16, 2 1/32 in. Diam.	05
No. 2589B—D. S. Ball Bearing Assembly, 1911-16	75
No. 2583—D. S. Ball Race, 1911-16, 2 5/8 in. Diam.	35
No. 2590—D. S. Ball Retainer, 1911-16, 2 1/32 in. Diam	0
No. 2591—D. S. Ball Thrust Collar, 1911-16, 2 1/2 in. Diam	10 40
No. 2592—D. S. Ball Bearings Each 1911-16, 5/16 in. Ball	03
No. 2593—D. S. Roller Bearing Sleeve	
No. 2595B—D. S. Only, Tapered, 1911-16, 1 3/32x53 1/16 in.	
No. 2595C—D. S. with Sleeve and Ball Bearing, 1911-16, 1 3/32x53 1/16 in.	5 00
No. 2595D—D. S. with Pinion, Complete 1911-16, 1 3/32x53 1/16 in.	6 00
No. 2595—D. S. Sleeve, 1911-16, 1 in. Bore, 3 1/32 in. Long	84
No. 2596—D. S. Screw	
No. 2587B—D. S. Pinion, 1911-16 Taper Bore, 11 Teeth	1 20
No. 2598—D. S. Castle Nut, 1911-16, 5/8 in., 18 Threads	06
No. 2598B—D. S. Pinion Key, 1911-16	0
No. 2540—D. S. Housing Front Bushing, 1909-16, 1 in. Bore, 1 3/4 in. Babbitt	.35
No. 2602B—Rear Axle Shaft, Tapered (60 in. Tread), 1911-16, 1 3/32x33 1/16 in.	1
No. 2694—Front Axle, Spindle Body, Right 1911-16	2
No. 2695—Front Axle, Spindle Body, Left, 1911-16	2 00
No. 2696—Spindle Arm, Left, 1911-16	60
No. 2696B—Spindle Arm, Right, 1911-16	60
No. 2697—Spindle Arm Nut, 1911-16, 9/16 in., 18 Threads	05
No. 2704—Stationary Cone, 1909-16, 1 3/16 in. Bore	20
No. 2705—Adjusting Cone, Right Thread, 1909-16, 5/8 in., 16 Threads	15
No. 2706—Adjusting Cone, Left Thread 1909-16, 5/8 in., 16 Threads	15
No. 2707—Spindle Nut, Right Thread	10
No. 2708—Spindle Nut, Left Thread	10
No. 2709—Spindle Washer, 1909-16, 25/32 in Hole by 1 3/4 in.	02
No. 2710—Spindle Bolt with Oiler, 1909-16, 5/16x6 3/4 in.	30
No. 2710A—Spindle Bolt, No Oiler	
No. 2711—Spindle Bolt Nut, 1909-16, 1/2 in., 20 Threads	0
No. 2713—Spindle Body Bushing (pair), Phosphore Bronze, 1909-16, 1 in. Bore	.30
No. 2714—Spindle Arm Bushing, Phosphor Bronze, 1909-16, 1 1/16 in. Bore, 1 1/16 in. Diam., 1 in. Long	0
No. 2715—Spindle Oiler, 1909-16	0
No. 2715B—Spindle Oiler Cap Assembly	
No. 2717—Spindle Con Rod, 1909-16	1 60
No. 2718—Spindle Con Rod Bolt with Oiler, 1909-16, 5/16x2 3/4 in.	1
No. 2718A—Spindle Connecting Rod Bolt, No Oiler	1
No. 2719—Spindle Con Rod Bolt Nut, 1909-16, 5/16 in., 20 Threads	02 1/2
No. 2722—Steering Yoke Clamp Bolt and Nut, 1909-16, 5/16x1 1/4 in.	05
No. 2723B—Steering Gear Con Rod, 1909-16, Includes Ball Sockets	90
No. 2728—Ball Socket Cap, 1909-16	15
No. 2729—Ball Socket Bolt and Nut, 1909-16 5/16x1 3/32 in.	06
No. 2733—Front Radius Rod, 1909-16	2 75
No. 2734—Front Radius Rod Nut, 1909-16, 9/16 in., 18 Threads	0
No. 2736—Front Radius Rod Ball Cap, 1909-1916	15
No. 2739—Front Radius Rod Ball Cap Screw, 1911-13, 5/8 in., 16 Threads	06
No. 2741—Radius Rod Ball Cap Stud and Nut, 1914-16	05
No. 2742—Radius Rod Ball Cap Spring, 1914-16	02
No. 2761—Steering Spindle Con Rod, 1909-16, 60 in. Tread	1 60
No. 2762—Steering Gear Con Rod, 1909-16 60 in. Tread, includes Ball Socket	90
No. 2800B—Front Wheel, Complete, 1909-16 30x3 in.	4 50
No. 2800C—Front Wheel, without Hub, 1909-1916, 30x3 in.	2 75
No. 2803C—Front Hub Assembly, 1909-16	2 00
No. 2804—Outer Race, 1909-16, 1 15/16 in. Diam.	1
No. 2805—Inner Race, 1909-16, 2 1/32 in. Diam.	5
No. 2806—Outer Ball Retainer, 1909-16, 1 9/32 in. Diam.	02
No. 2807—Inner Ball Retainer, 1909-16, 2 1/32 in. Diam.	3
No. 2808—Dust Ring, 1909-16, Steel, 2 1/32 in. Diam.	05

	Each
No. 2809—Felt Washer, 1909-16, 2 1/2 in. Diam.	05
No. 2810—Large Balls, Each, 1909-16, 7/16 in.	04
No. 2811—Small Balls, Each, 1909-16, 3/8 in.	03
No. 2814C—Rear Wheel, Taper Hub, 1912-16, 30x3 1/2 in.	5 00
No. 2814D—Rear Wheel, without Hub, 1909-1916, 30x3 1/2 in.	3.50
No. 2815C—Rear Hub, Tapered, 1912-16, 3 1/2 in. Long	1.42
No. 2816B—Rear Hub Key, for Tapered Axle, 1912-16, 1/4x1/4x2 1/16 in.	.05
No. 2818—Hub Cap, 1909-16, 2 1/8 in., 24 Threads	.18
No. 2825—Hub Bolt and Nut, 1911-16, 3/4x2 1/8 in., 16 Threads	.03
No. 2827—Hub Flange, 1911-16, 6 in. Diam.	.15
No. 2828—Rear Hub Lock Nut, 1912-16, 1 in., 18 Threads	.07
No. 2829—Rear Hub Felt Washer 1913-16	.05
No. 2908—Gasoline Tank, Pet Cock, 1909-16, 3/8 in. Pipe Threads	15
No. 2910—Feed Pipe Pack Nut, 1909-16, 3/8 in., 20 Threads	06
No. 3002—Motor, Cylinder Head Gasket, 1909-16, Copper Asbestos	.45
No. 3003—Cylinder Head Cap Screw, 1909-16, 7/16x2 9/16 in.	$0 06 1/2
No. 3004—Cylinder Head Outlet Connection, 1909-16, Malleable	
No. 3005—Cylinder Head Outlet Con Gasket, 1909-16, Copper	.05
No. 3006—Cylinder Head Outlet Hose, 1909-1916, 2x3 in.	10
No. 3007—Cylinder Head Outlet Hose Clip, 1909-16, 2 3/8 in. Diam	05
No. 3008—Cylinder Head Outlet Con Screw, 1909-16, 7/16x1 5/8 in.	.05
No. 3010—Cylinder Cover Bolt, 1909-16, 5/16x7/8 in.	.05
No. 3011—Cylinder Cover Cap Screw, 1909-16 5/16x1 in.	03
No. 3012—Cylinder Cover Felt, 1909-16	.05
No. 3013—Cylinder Cover and Crank Case Bolt and Nut, 1909-16, 5/16x1 3/32 in.	06
No. 3015—Cylinder Water Inlet Connection, 1909-16, Cast Iron	20
No. 3016—Cylinder Inlet Con Screw, 1909-16, 7/16x1 1/8 in.	03 1/2
No. 3018—Cylinder Water Inlet Gasket 1909-16, Copper	05
No. 3020—Piston Complete, 1909-16 3 3/4 in. Diam.	1 7
No. 3020C—Piston Complete, 1909-16, 0025 in. Oversize	1 7
No. 3020D—Piston Complete, 1909-16, 03125 in. Oversize	1 70
No. 3020X—Piston Complete, 1909-16, 005 in. Oversize	70
No. 3021—Piston Only, 1909-16, 3 3/4 in. Diam.	1.60
No. 3022—Piston Pin, 1909-16, 4 3/16 in. Diam., 3 1/2 in. Long	.25
No. 3022 1/2—Piston Pin Bushing, pair, 1909-1916, 1 5/16 in. Diam., 1 7/32 in. Long	.35
No. 3023—Piston Ring, Mitre Cut, 1909-16, 3 3/4 in.	.12
No. 3023A—Piston Ring, Step Cut, 1909-16, 1/4x3 3/4 in.	.15
No. 3023B—Piston Ring, Mitre Cut, 1909-16 03125 in. Oversize	.12
No. 3023C—Piston Ring, 1909-16, 0025 in. Oversize	12
No. 3023X—Piston Ring, 1909-16, 005 in. Oversize	12
No. 3024—Connecting Rod, 1909-16, includes Bearings	1 50
No. 3025—Con Rod Cap Bolt and Nut, 1909-1916, 5/16x2 in., 24 Threads	.10
No. 3029—Con Rod Clamp Screw, 1909-16, 5/16x1 1/8 in.	.06
No. 3031—C. S. Rear Bearing Cap, 1909-16, 3 1/4 in. Long, Babbitted	.60
No. 3032—C. S. Front Bearing Cap, 1909-16, 1 15/16 in. Long, Babbitted	.50
No. 3033—C. S. Center Bearing Cap, 1909-16, 2 1/4 in. Long, Babbitted	.50
No. 3034—C. S. Bearing Bolt, Center and Front, 1909-16, 5/16x6 1/16 in., 20 Threads	.20
No. 3035—C. S. Bearing Bolt Nut, 1909-16, 5/16 in., 20 Threads	.05
No. 3036—C. S. Rear Bearing Bolt, 1909-16, 5/16x4 1/32 in.	.15
No. 3037—C. S. Center Bearing Liner, 1909-1916, 2 1/4 in. Long, Brass	.01
No. 3038—C. S. Bearing Liner, Front, 1909-1916, 1 15/16 in. Long, Brass	.01
No. 3039—C. S. Rear Bearing Liner, 1909-16, 3 in. Long, Brass	.01
No. 3040—C. S. Starting Pin, 1909-16, 5/16x2 3/4 in.	.05
No. 3042—Cam Shaft Front Bearing, 1909-16, Cast Iron, 2 in. Long	.25
No. 3043—Cam Shaft Center Bearing, 1909-16, Cast Iron, 2 1/4 in. Long	25
No. 3044—Cam Shaft Rear Bearing, Phosphor Bronze, 1909-16, 1 7/16 in. Long	25
No. 3045—Cam Shaft Bearing Ring, 1909-16 3/16x1 1/8 in.	01
No. 3046—Cam Shaft Bearing Set Screw, 1909-16, 1/4x5/8 in.	.04

REPAIR PARTS FOR FORD CARS

	Each
No. 3049—Cam Shaft Gear Dowel Pin, 1909-1916, ⅜x⅞ in.	.07
No. 3051—Cam Shaft Small Gear Key, 1909-1916, Special Woodruff Key	.03
No. 3052—Valve, 1909-16, Exhaust and Inlet	.15
No. 3054—Valve Spring, 1909-16, 2⅜ in Long	.05
No. 3056—Valve Spring Seat, 1909-16, 1⅛ in. Diam.	.0
No. 3057—Valve Spring Seat Pin, 1909-16, ⅞₄x1⅛₂ in.	.01
No. 3058—Push Rod, 1909-16, ⅛ in. Diam., 21¹⁵/₃₂ in	.2
No. 3061—Exhaust Pipe Pack Nut, 1909-16, 1⅞ in., 18 Threads, Brass	.2
No. 3063—Inlet and Exhaust Pipe Gasket, 1909-16, 1½ in O. D. Copper	.08
No. 3064—Inlet and Exhaust Pipe Gland, 1909-16, 1¼ in. Diam., Iron	.03
No. 3066—Inlet and Exhaust Clamp Stud and Nut, 1909-16, ⅜x3¼ in.	.05
No. 3068—Breather Pipe, 1909-16, 14⅛ in. Long, Steel	.15
No. 3070—Crank Case and Cylinder Gasket Left, 1909-16, Felt	.03
No. 3071—Crank Case and Cylinder Gasket Right, 1909-16, Felt	.03
No. 3072—Crank Case and Cylinder Cover Cap Screw, 1909-16, ⅜x1 in	.0
No. 3073—Crank Case Arm Bolt and Nut, Side, 1909-16, ⅜x2½ in.	.07
No. 3074—Crank Case Arm Bolt and Nut, Top, 1909-16, ⅜x2¹³/₃₂ in.	.1
No. 3076—Crank Case Front Frame Bearing, 1909-16	.55
No. 3077—Crank Case Front Bearing Cap, 1909-16	.10
No. 3078—Crank Case Front Bearing Screw, 1909-16, ⅜x⅞ in	.07
No. 3079—Crank Case Oil Cock, 1909-16, ⅛ in. Pipe Threads, Brass	.15
No. 3080—Crank Case Drain Cup Plug, 1909-1916, ¾ in., 24 Threads	.06
No. 3080B—Crank Case Drain Cup Plug Gasket, 1909-16	.01
No. 3102—Crank Case Lower Cover Gasket, 1912-16, Felt	.10
No. 3103—Crank Case Lower Cover Screw, 1912-16, ⅜₂x⅞ in.	.03
No. 3111—Cylinder Valve Cover Gasket, 1912-1916, Felt	.02
No. 3112—Cylinder Valve Cover Stud and Nut, 1912-16, ⅜₂x3¹³/₃₂ in.	.06
No. 3115—Set Motor Felt Gaskets, including Nos. 2510, 3070, 3071, 3107, 3111, 3563, 3577	.30
No. 3158—Commutator Only, 1912-16	1.25
No. 3162—Commutator Case Support Bolt, 1912-16, ⅜₂x2¼ in., 24 Threads	.05
No. 3163—Commutator Case Spring, 1912-16, 3⅛ in. C. to C.	.3
No. 3165—Commutator Brush Assembly, 1912-16	.10
No. 3167—Commutator Roller, 1912-16, 4⅝₄ in. Outside Diam., ⅛ in. Long	.10
No. 3168—Commutator Roller Pin, 1912-16, ⅜₂x2¹³/₃₂ in.	.03
No. 3169—Commutator Arm with Roller, 1912-16	.25
No. 3170—Commutator Roller Arm Spring, 1912-16, Coil Spring	.01
No. 3173—Commutator Arm Pin, 1911-16, ⅜₂x2¹³/₃₂ in.	.02
No. 3176—Commutator Oiler, 1912-16, ⅛ in. Pipe Threads	.10
No. 3177—Commutator Felt Ring, 1912-16, Felt	.02
No. 3206—Commutator Brush Cap, 1909-16, ⅞ in. Diam.	.01
No. 3207—Commutator Brush Cap Pin, 1909-1916, ⅛x2¹³/₃₂ in.	.01
No. 3210—Commutator Contact Point Nut, 1910-16, ⅞₄ in Hexagon	.02
No. 3212—Commutator Thumb Nut, 1909-16, No. 10, 32 Threads	.03
No. 3221—Commutator Case with Fibre Ass[illegible] 1912-16	.8
No. 3252—Magneto Spool Support Screw	.0
No. 3270—Magneto Fly Wheel Cap Screw, 1909-16, ⅞₄x1¹³/₃₂ in.	.10
No. 3279—Magneto Contact Washer, 1909-16, Felt on Transmission Cover	.01
No. 3304—Transmission Rev. Gear Bushing, Phosphor Bronze, 1909-16, 2⅝₄ in. Rear	.75
No. 3309—Transmission Slow Speed Gear Bushing, Phosphor Bronze, 1909-16, 1²⁵/₃₂ in. Ream	.50
No. 3313—Transmission Triple Gear Assembly, 1909-16	3.00
No. 3314½—Transmission Triple Gear Flanged Bushing, Phosphor Bronze, 1911-16, 1⅝₄ in Diam. by 1³⁵/₆₄ in.	.40
No. 3315—Transmission Triple Gear Shaft, 1909-16, 1¹⁵/₃₂ in. Diam. by 2¼ in	.30
No. 3318—Transmission Driven Gear Key, 1909-16, "B" Woodruff Key	.0
No. 3320B—Transmission Driven Gear Sly Bushing, Phosphor Bronze, 1909-16, 1 in Ream by 2⅜ in. Flange	.50
No. 3320C—Transmission Driven Gear Sly Bushing, Phosphor Bronze, 1909-16, 1½ in. Long	.25
No. 3323—Transmission Driving Plate Screw	.05
No. 3331—Transmission Gear Shaft, 1909-16, 1 in. Diam. by 7½ in. Over-all	2.25
No. 3333—Transmission Cutch Disc Drum Key, 1909-16, "C" Woodruff	.05
No. 3362—Transmission Cover Bolt and Nut, 1909-16, ⅜x1¹³/₃₂ in.	.05
No. 3363—Transmission Cover Felt Gasket, Front, 1909-16, ⅛₄x½x15½ in.	.02
No. 3366—Transmission Cover Door Gasket, 1909-16, Felt	.05
No. 3367—Transmission Cover Door Screw, 1909-16, ⅝₄x½ in.	.01
No. 3368—Universal Ball Cap, Rear, 1909-16, 5⅝ in.	$0.35
No. 3369—Universal Ball Cap, Front, 1909-16, Bearing Included	1.00
No. 3371—Universal Ball Cap Bolt, 1909-16, ⅜₂x1¹³/₃₂ in.	.05
No. 3372—Universal Ball Cap Bolt and Nut, 1909-16, ⅜₂x1¼ in.	.05
No. 3374—Transmission Cover Bolt and Nut, 1909-16, ⅜₂x1¹³/₃₂ in.	.08
No. 3375—Transmission Cover Screw, 1909-[illegible]	.0
No. 3377—Transmission Cover Felt Gasket, 1909-16, Pair	.10
No. 3379—Transmission Cover Sloping Door Gasket, 1911-16	.05
No. 3400—Transmission Clutch Release Ring, 1909-16, 3¹⁵/₁₆ in. Long, Brass	.40
No. 3411—Clutch Lever Clevis Pin, 1909-16, ⅝₄x1 in.	.02
No. 3413—Transmission Band Assembly, 1909-16	.70
No. 3414—Transmission Band Ear, 1909-16	.14
No. 3414B—Transmission Band Steel Body, 1909-16	.15
No. 3415—Transmission Band Washer, 1909-1916, 2³⁵/₆₄ in. Hole by ⅞ in. Diam.	.02
No. 3416—Transmission Band Lining, 1909-1916	.25
No. 3421B—Transmission Band Ear Iron Rivet, 1909-16, ⅝₄x⅜ in., per Dozen	.04
No. 3422B—Transmission Band Brass Rivet, 1909-16, ⅝₄x⅛ in., per Dozen	.05
No. 3423B—Transmission Band Brass Rivet, ⅝₄x⅝₄ in., per Dozen	.05
No. 3425—Transmission Band Spring, 1909-16, [illegible]	.03
No. 3433—Speed Lever Clevis Pin	.02
No. 3446—Slow Speed Con. Lock Nut	.02
No. 3501B—Steering Gear Arm, 1909-16	.90
No. 3511—Steering Gear Wheel Nut, 1909-16, ⅜ in., 16 Threads	.10
No. 3520—Steering Gear Drive Pinion Key, 1909-16, ⅛₄ in Square, ³¹/₃₂ in.	.02
No. 3527—Lead and Throttle Spring, 1909-16	.03
No. 3534B—Commutator Pulley Rod, 1909-16	.10
No. 3535—Carburetor Pull Rod, 1909-16	.10
No. 3536—Ball and Socket Joint, 1909-16	.06
No. 3537—Ball and Socket Joint Nut, 1909-16, ⅜₃₂ in., 32 Threads	.01
No. 3540—Steering Post Bracket Bolt and Nut, 1909-16, ⅜₂x2¼ in.	.05
No. 3541—Steering Post Bracket Bolt and Nut, 1909-16, [illegible]	.0
No. 3544—Steering Post Bracket Felt Washer, 1909-16	.02
No. 3548—Steering Gear Ball Arm Key, 1909-16, Woodruff	.02
No. 3563—Steering Post Bracket Grease Cup, 1909-16, ⅛ in. Pipe Threads	.10
No. 3624C—Front Floor Rubber Matting, 1909-14, 27⁵/₁₆x29⁵/₁₆ in.	1.50
No. 3624E—Front Floor Rubber Matting 1915-16, 28⅛x29⁵/₁₆ in., Touring and Runabout Cars	1.50
No. 3642—Dash Bracket Bolt and Nut	.06
No. 3665—Gas Lamp Bracket Nut	.05
No. 3800—Front Spring, 1909-16	3.00
No. 3801—First Leaf, Main Leaf, 1909-16	1.00
No. 3802—Second Leaf, 1909-16	.80
No. 3803—Third Leaf, 1909-16	.70
No. 3804—Fourth Leaf, 1909-16	.60
No. 3805—Fifth Leaf, 1909-16	.50
No. 3806—Sixth Leaf, 1909-16	.40
No. 3807—Seventh Leaf, 1909-16	.25
No. 3808—Front Spring Clip, 1909-16	.25
No. 3809—Front Spring Clip Nut, 1909-16, ½ in., 20 Threads	.05
No. 3811—Front Spring Tie Bolt and Nut, 1909-16, ⅝₄x2¼ in.	.05
No. 3813—Front Spring Hanger, 1909-16	.35
No. 3815—Front and Rear Spring Hanger Nut, 1909-16, ⅛ in., 20 Threads	.02½
No. 3817—Front and Rear Spring Hanger [illegible], 1909-16	.07
No. 3820—Front Spring Perch Bushing, 1909-16, 1⅛₄x1½ in., Brass	.07
No. 3821—Front Spring Perch Nut, 1909-16, ½ in., 18 Threads	.05
No. 3824—Rear Spring, 1909-16, 56 in Tread [illegible]	10.0
No. 3825—First Leaf Main Leaf, 1909-16	2.00
No. 3826—Second Leaf, 1909-16	$1.70
No. 3827—Third Leaf, 1909-16	1.50
No. 3828—Fourth Leaf, 1909-16	1.40
No. 3829—Fifth Leaf, 1909-16	1.20
No. 3830—Sixth Leaf, 1909-16	1.20
No. 3831—Seventh Leaf, 1909-16	1.00
No. 3832—Eighth Leaf, 1909-16	.80
No. 3833—Rear Spring Clip, 1909-16, 4½ in	.25
No. 3834—Rear Spring Clip Nut, 1909-16, ⅝₄ in., 18 Threads	.05
No. 3837—Rear Spring Tie Bolt and Nut, 1909-16, ⅜₂x2¹³/₃₂ in.	.08
No. 3840—Rear Spring Hanger, 1909-16	.35
No. 3844—Rear Spring Perch Bushing, 1909-1916, ⅝₄ in. Bore, ⅞ in Diam., 2 in.	.12
No. 3845—Rear Spring Perch Nut, 1909-16, ¹¹/₁₆ in., 16 Threads	.08
No. 3847—Front Spring Retainer Clip with Bolt and Nut, 1909-16	.05
No. 3848—Rear Spring Retainer Clip with Bolt and Nut, 1909-16	.05
No. 3850—Rear Spring, 60 in. Tread, 1909-16, 48½ in. Long, 8 Leaf	10.00
No. 3851—Rear Spring Clip, 1909-16, ⅝₄x1⅛ in.	.30
No. 3852—Rear Spring Tie Bolt and Nut, 1909-16, ⅜₂x3¹³/₃₂ in.	.05
No. 3853—First Leaf, Main Leaf, 1909-16	2.60
No. 3854—Second Leaf, 1909-16	2.25
No. 3855—Third Leaf, 1909-16	2.00
No. 3856—Fourth Leaf, 1909-16	1.75
No. 3857—Fifth Leaf, 1909-16	1.60
No. 3858—Sixth Leaf, 1909-16	1.50
No. 3859—Seventh Leaf, 1909-16	1.30
No. 3860—Eighth Leaf, 1909-16	1.10
No. 3902—Radiator-Thermo Syphon Starting Crank Spring, 1909-16	.03
No. 3928A—Radiator Cap, Handled, 1909-16	.30
No. 3930—Radiator Stud Spring, 1909-16	.02
No. 3934—Radiator Rod Nut, 1909-16, ⅜ in. [illegible] Thread	.02
No. 3940—Outlet Connection Cock, 1909-16, ⅛ in. Pet Cock	.15
No. 3944—Outlet Connection Hose, 1909-16, [illegible]	.10
No. 3945—Outlet Connection Hose Clip, 1909-[illegible] 2¾ in. Diam.	.05
No. 3963—Fan Drive Pulley, 1909-16, Steel, Lower	.25
No. 3964—Fan Belt, Chrome Leather, Four Stitched, 1909-16	.30
No. 3966—Fan Shaft, 1909-16, ⅝₄x4⅝₄ in.	.18
No. 3968—Fan Bracket Bolt, 1909-16, ⅛₂x2⅝ in.	.10
No. 3970—Fan Grease Cup, 1909-16	.10
No. 3973—Fan Adjusting Screw and Nut, 1909-16, ⅜₂x1¾ in.	.05
No. 4026—Muffler Assembly, Special, Extra Silent, 1909-16	1.70
No. 4030—Muffler Rod Only, 1909-16	.05
No. 4031—Muffler Rod Nut, 1909-16	.02
No. 4032—Muffler Bracket, Exhaust, 1909-1915	.30
No. 4033—Muffler Bracket, Intake, 1909-15	.30
No. 4034—Muffler Bracket Bolt and Nut, 1909-16, ⅜₂x2⅝₄ in.	.06
No. 4038—Muffler Asbestos, 1909-16	.10
No. 4039—Muffler Asbestos Band, 1909-16	.02
No. 4350—Spark Plug Wire, 1909-16, 15 in., No. 1 Cylinder	.15
No. 4351—Spark Plug Wire, also Magneto to Coil, 1909-16, 11¼ in., No. 2 Cylinder	.15
No. 4353—Spark Plug Wire, 1909-16, 8 in., No. 3 and 4 Cylinders	.10
No. 4354—Spark Plug Terminal, 1909-16, Copper	.01
No. 4355—Commutator Wire Assembly, 1909-1916, Four Wire	.40
No. 4355A—Commutator Wire, 1915-16, Five Wires	.70
No. 4355B—Commutator Wire Assembly, 1909-16, Four Wires Metallic	.60
No. 4355C—Commutator Wire Assembly, 1915-16, Five Wires Metallic	.70
No. 4356—Commutator Wires with Terminal, 1909-16	.10
No. 4357—Commutator Wire Terminal, Coil End, 1909-16, Copper	.01
No. 4431—Carbureter Priming Rod	.05

HICKORY AXE HANDLES

HAND SHAVED AXE HANDLE GRADES

Zenith Extra Quality—Perfect, Second Growth Highest Grade, all White Handles.

Hartford Quality—Perfect, all white handles.

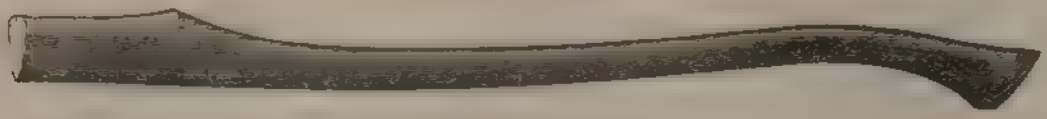
Northern King Quality—Perfect, all white handles, and such heavy handles as may be tipped with red on one end.

TURNED AXE HANDLE GRADES

No. 1 Quality—Perfect handles of less than 18 inches white wood between head and eye, and very light weight handles unfit for Extra Grade, with 9 inches or more white wood in the center of the handles, with light streaks.

No. 2 Quality—Best selection of imperfect handles, permitting all red.

SINGLE BITTED



HAND SHAVED, OVAL, SINGLE BIT

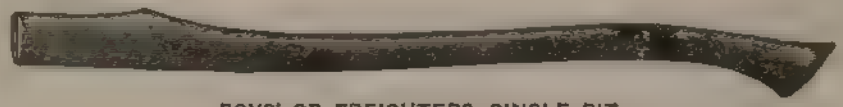
	Per Dozen		Per Dozen
Zenith; Highest Grade; 36 in.	$8.50	Hartford Quality; 36 in.	$7.20

Zenith and Hartford Handles are packed each Handle in Individual Paper Sack. One Dozen in a Carton, Two Dozen in a Crate

TURNED, SINGLE BIT

	Per Dozen		Per Dozen
No. 1 Quality; 36 in.	$4.90	No. 2 Quality; 36 in.	$3.70

Two Dozen in a Crate; Average Weight 34 Lbs. per Crate



BOYS' OR FREIGHTERS, SINGLE BIT

	Per Dozen
28 in. Long; Oval, Selected Hickory	$3 90
30 in. Long; Oval, Selected Hickory	4.25

Two Dozen in a Crate; Weight 30 Lbs. per Crate

OCTAGON, PACIFIC COAST PATTERN, SINGLE BIT

	Per Dozen		Per Dozen
Zenith Grade; Hand Shaved; 36 in.	$8.50	Hartford; Hand Shaved; 36 in.	$7 20
		Northern King; XXX Quality; 36 in.	5.40

Two Dozen in a Crate; Average Weight 30 Lbs. per Crate

DOUBLE BITTED

OVAL, DOUBLE BIT

Zenith Quality; Hand Shaved

	Per Dozen
36 in.; Weight 21 Lbs. per Dozen	$ 9.00
38 in.; Weight 23 Lbs. per Dozen	9.50
40 in.; Weight 24 Lbs. per Dozen	10.50
42 in.; Weight 26 Lbs. per Dozen	12.00

Portland Special; Hand Shaved; Highest Quality

	Per Dozen
36 in.; Weight 21 Lbs. per Dozen	$ 9.00
38 in.; Weight 23 Lbs. per Dozen	9.50
40 in.; Weight 24 Lbs. per Dozen	10.50
42 in.; Weight 26 Lbs. per Dozen	12.00

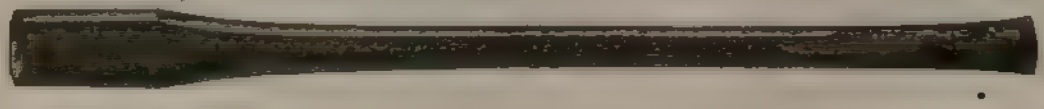
Hartford; Oval

	Per Dozen
36 in.; Weight 21 Lbs. per Dozen	$ 8.00
38 in.; Weight 23 Lbs. per Dozen	8.50
40 in.; Weight 24 Lbs. per Dozen	9.50
42 in.; Weight 25 Lbs. per Dozen	11.00

Two Dozen in a Crate

No. 1 Quality; Turned; Oval; 36 in.	$4.90
No. 2 Quality; Turned; Oval; 36 in.	3.70

Two Dozen in a Crate; Average Weight 32 Lbs. per Crate



OCTAGON, PACIFIC COAST PATTERN, DOUBLE BIT

Zenith Quality; Hand Shaved

	Per Dozen
36 in.	$ 9.00
38 in.	9.50
40 in.	10.50
42 in.	12.00

Hartford Quality; Hand Shaved

	Per Dozen
36 in.	$ 8.00
38 in.	8.50
40 in.	9 50
42 in.	11.00

Northern King; XXX Quality

	Per Dozen
36 in.	$5.50

OAK AXE HANDLES

Single Bitted

OCTAGON, PACIFIC COAST PATTERN, WHITE OAK, SINGLE BIT

	Per Dozen
Oregon Oak, Hand Shaved, 36 in.	$6.50

Two Dozen in a Crate; Weight 38 Lbs. per Crate

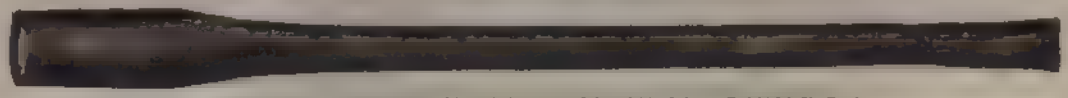
WOOD SPLITTER'S SINGLE BIT, FULL SIZED EYE

	Per Dozen
Oregon Oak, 30 in.	$5.00

OCTAGON, PACIFIC COAST PATTERN, OREGON OAK, HAND SHAVED, DOUBLE BIT

	Per Dozen		Per Dozen
36 in.; Weight 44 Lbs. Crate	$6.00	40 in.; Weight 49 Lbs. Crate	$7.00
38 in.; Weight 48 Lbs. Crate	6.50	42 in.; Weight 51 Lbs. Crate	7.50

Two Dozen in a Crate; Average Weight 35 Lbs. per Crate



LOGGERS' BARKING HANDLES, OREGON OAK, DOUBLE BIT

	Per Dozen
Second Growth Oregon Oak; Length 34 in.; Designed Expressly for Logging Camps for Barking Logs, made same as a Double Bit Handle except that it has a Slight Crook near the Axe End which Enables the User to Stand in an Easy Position and Perform More Work. Any Ordinary Double Bitted Axe takes this Handle	$6.50

Two Dozen in a Crate; Weight 40 Lbs. per Crate

HICKORY REVERSIBLE BROAD AXE HANDLES

	Per Dozen
Length 36 in. Turned Hickory; Used Entirely for Hewing Purposes, in a Broad Axe	$8.60

Five Dozen in a Crate; Weight 75 Lbs. per Crate

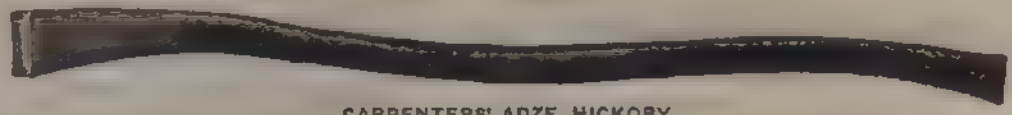
GRUB HOE HANDLES

BENT HICKORY

	Per Dozen
No. 1 Quality; 36 in.	$7 70
No. 2 Quality; 36 in.	4.10

5 Dozen in a Crate; Average Weight 18 Pounds per Dozen

ADZE HANDLES



CARPENTERS' ADZE, HICKORY

For Carpenters', Railroad and Ship Adzes

	Per Dozen		Per Dozen
Excelsior Quality; 34 in.	$7.20	No. 1 Quality; 34 in.	$5.60

SHIP ADZE, HICKORY

	Per Dozen
No. 1 Quality; 34 in.	$5 20

Two Dozen in a Case; Weight 15 Lbs per Dozen

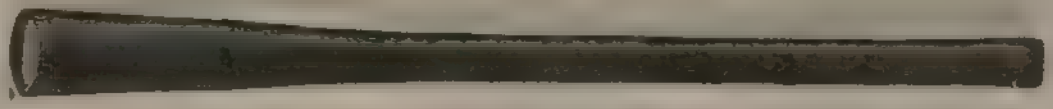
PICK HANDLES

Extra Quality—Perfect, all white handles.

Excelsior Quality—Perfect handles with not more than 10 in red wood at one end.

No. 1 Quality—Perfect handles that do not run over one-half red wood the full length.

No. 2 Quality—Perfect all red handles, and such as are less than one half white wood.



RAILROAD PICK AND MATTOCK

For Railroad or Surface Picks, Mattocks and Grub Hoes; Length 36 in.

	Per Dozen
Extra Quality; Hickory	$11.50
No. 1 Quality; Hickory	7.70
No. 2 Quality; Hickory	4.90
Eastern Maple; all white	$7 00
Oregon Ash	7.50

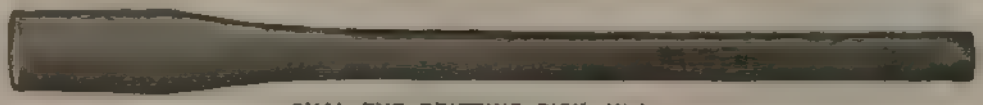
Five Dozen in a Case; Average Weight 30 Lbs. per Dozen

OCTAGON HAND SHAVED DRIFTING PICKS

Used by Miners and Prospectors

	Per Dozen
Extra Quality; Hickory; 34 in.	$6 40

6 Dozen in a Crate; Average Weight 22 Pounds per Dozen

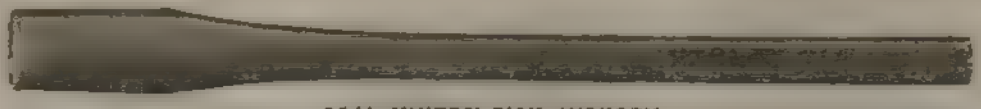


OVAL EYE DRIFTING PICK, Hickory

Used by Miners and Prospectors

	Per Dozen
Excelsior Quality; 34 in.; Weight 21 Lbs. per Dozen	$5 40
Excelsior Quality; 36 in. Long; Weight 22 Lbs. per Dozen	5 40
No. 1 Quality; 34 in.; Weight 21 Lbs. per Dozen	4.50

Five Dozen in a Case



COAL MINERS' PICK, HICKORY

Specify whether for the small, light Mining or Cutting Pick; the Medium Pick or the Large Heavy Coal Picks

Extra Quality—Perfect all white handles, may be tipped with red at one end.

No. 1 Quality—Not to be more than two-thirds white wood, slight defects and streaks permitted; also all red handles.

	Per Dozen
Extra Quality; 34 in.	$6.60
No. 1 Quality; 34 in.; Medium Size Eye	$3.30
No. 1 Quality; 34 in.; Small Size Eye	3.30

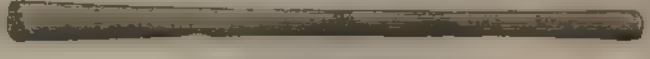
Five Dozen in a Case; Average Weight 17 Lbs. per Dozen

MAUL HANDLES

ADZE EYE, HICKORY, WOOD CHOPPERS'

	Per Dozen
Extra Quality; 36 in.	$8 20
Oregon Oak; 36 in.	6.50

Five Dozen in a Crate; Average Weight 24 Pounds per Dozen

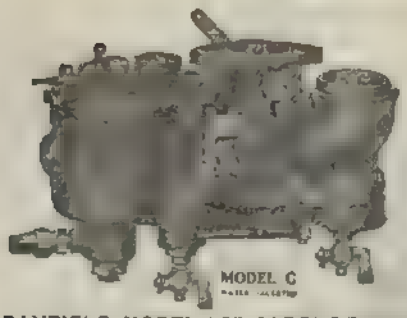


POST OR FARMERS' MAUL

	Per Dozen
Length 36 in.; Selected Hickory; Weight 14 Lbs. per Dozen	$3.20

Five Dozen in a Case

RAYFIELD CARBURETORS



RAYFIELD MODEL "G" CARBURETORS

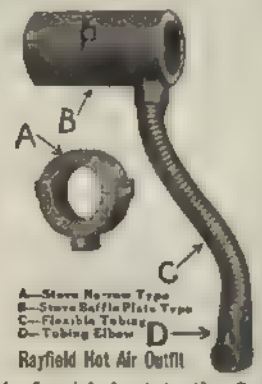
Water Jacketed; has but two Adjustments, One for High Speed, the other for Low Speed, both controlling the supply of Gasoline; There are three Air Intakes: The constant, or fixed air opening, and two automatically controlled air valves; These Air Valves are inter-connected and operate together in accordance with the suction of the Motor; Fuel is supplied through two nozzles; One supplies all the Gasoline required when Motor is idling; The additional Gasoline required for higher speeds is furnished by a Nozzle, which is controlled by a tapered metering pin located under the Automatic Air Valve; As the air valve is drawn open, admitting more air, it operates the Metering Pin, which gradually opens the Nozzle, supplying additional Gasoline in correct proportion to the air.

A Dash or Steering Post Control raises the low speed Adjusting Needle, supplying a richer mixture for starting purposes, and to take care of cold motor and cold weather conditions.

Nos.	Size	Weight, Lbs.	Each
G2	1 in.	11½ Lbs.	$25.00
G3	1¼ in.	12¾ Lbs.	30.00
G4	1½ in.	12½ Lbs.	35.00
G5	1¾ in.	13 Lbs.	40.00
G6	2 in.	13 Lbs.	45.00

One in a Box, Complete Ready to Install

RAYFIELD HOT AIR OUTFITS



Rayfield Hot Air Outfit

It is necessary to furnish heat to the Carburetor to properly Vaporize the low grade of Gasoline which is now in use.

Baffle Plates cause the air to pass around the Exhause Pipe several times, heating it to a high degree, thereby producing maximum efficiency

BAFFLE PLATE TYPE

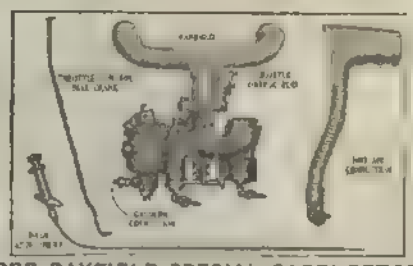
Nos.	B3	B13	B1	B6	B8	B16
Length, In.	6	6	4	4	4	4
Can Be Bored, In.	1⅛–2⅛	2⅛–3⅛	1¼–2	2–3⅜	2¼–2⅝	1¾–2¼
Size Tubing, In.	1⅞	1⅞	1⅞	1⅞	1⅞	1⅞
Each	$1.65	2.30	1.15	1.85	1.75	1.30

NARROW TYPE

Nos.	A1	A2	A5
Length, In.	1½	1½	1½
Can Be Bored, In.	1¼–1½	1¾–2⅛	2⅜–3⅜
Size Tubing, In.	1⅞	1⅞	1⅞
Each	$1 00	1 00	1 00

Average Weight 8 Oz. Each

When installing the hot air fittings, locate the stove, if possible, just back of the last cylinder, so that the highest degree of heat is secured from all cylinders. One end of the flexible tubing is fitted into the stove and the other end into the elbow attached to the fixed air opening of the Carburetor. The ends should be fastened by soldering or by using a cotter pin.



FORD RAYFIELD SPECIAL CARBURETORS

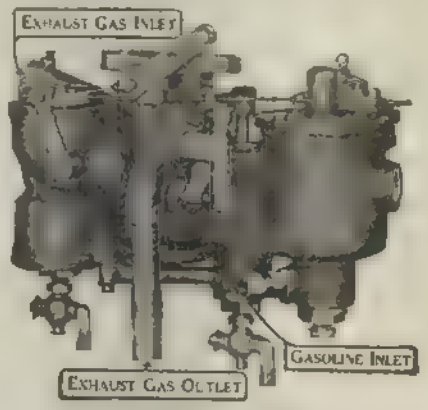
A Ford Car equipped with one of these Carburetors developes more Speed and Power, has greater Flexibility and saves from 30 to 50 per cent in fuel; Makes the Car start easily in cold weather, Throttle down, picks up quickly and greatly assists in climbing hills.

Each

No. LR—Outfit consists of a 1 in. Model L Rayfield Carburetor, a Specially Designed Ford Manifold, Hot Air Fitting, Throttle Control Bell Crank, Throttle Control Rod, Special Gasoline Connection and Rayfield Dash Adjustment.....$23.00

One in a Box, Complete ready to Install

When a Ford is equipped with Magneto Ignition a Special Manifold and "Model B" Rayfield are used



RAYFIELD SPECIAL

Carburetor Equipment for Buick Cars; Meets the demand for a Carburetor particularly applicable to the Buick Motor; the Carburetor is heated by exhaust gas, using the standard Buick connections; Installation can be made in two hours; Sold under the Regular Rayfield Guarantee; Prices include the Carburetor complete, with all necessary Fitting for installation.

Each

No. GL2 —Special for Buick D44, D45, 1916-17 Models $27 35
No. GL3A—Special for Buick D54, D55, 1916-17 Models 32 25
No. GL3B—Special for Buick C54, C55, 1915 Model 32 25
No. GL3C—Special for Buick B54, B55, 1914 Model..... 32.25

Weight 12½ Lbs. Each

REO SPECIAL RAYFIELD CARBURETORS

The Rayfield Carburetor on a Reo Car produces greater all around efficiency with less fuel than any other Carburetor. This Reo Special is sold on the regular Rayfield guarantee.

The Rea Special Rayfield Carburetor is the standard "Model G" in general construction, specially fitted to Reo Motors. It can be installed complete by anyone in less than three hours. Complete with all necessary fittings.

Each

No. GL6R—Special Carburetor, Reo "6", 1915 or 1916.... ...$31 85
No. GL4R—Special Carburetor, Reo "4", 1915 or 1916.... . 26.85

RAYFIELD CARBURETOR PARTS

For Models G2, G3, G4, G5, G6, L2, L3, L4, GL and LL

Important—When ordering parts always order by Part Number, Name and Model of Carburetor, and also state Name, Model and Year of Car on which it is used. To avoid mistakes: Select part required by Number from illustration above. The same Number, Name of Part, and Price are shown below.

		Each
No. 8	—Core Plug	$0 30
No. 11	—Float Chamber Cover Screw	.05
No. 12	—Float Chamber Tubing Holder	.15
No. 13	—Float Chamber Tubing Holder Retaining Screw	.05
No. 14	—Float Chamber Tubing Holder Binding Screw	.05
No. 14	—Cam Shaft Tubing Holder Binding Screw	.05
No. 15	—Cam Shaft Tubing Holder	.15
No. 16	—Cam Shaft Tubing Holder Retaining Screw	.05
No. 24	—Drain Plug Gasket	.05
No. 27A	—Drain Plug for Float Chamber	1.00
No. 27B	Drain Plug for Float Chamber	.35
No. 37	—Priming Cap Retaining Screw	.05
No. 37	—Throttle Lever Retaining Screw	.05
No. 50	—Flushing Pan Retaining Screw	.05
No. 54	—Throttle Butterfly Valve Retaining Screw	.05
No. 55	—Cam Shaft, Assembly	2.00
No. 63	—Throttle Lever	.15
No. 66	—Drain Cock for Float Chamber	.70
No. 66	—Dash Pot Drain Cock	.70
No. 67	—Air Valve Shaft	.10
No. 71	—Low Speed Adjusting Screw	.25
No. 72	—Low Speed Adjustment Retaining Pawl	.05
No. 72	—Priming Cap Lever Pawl	.05
No. 73	—Low Speed Adjustment Retaining Pawl Spring	.05
No. 73	—Priming Cap Lever Pawl Spring	.05
No. 73	—Arm Pawl Spring	.05
No. 75	—Water Plug, ⅛ in Pipe Thread	.10
No. 75	—Drain Plug for Strainer	.10
No. 76	—Elbow Water Unions; Specify Tubing Size	.40
No. 76	—Gasoline Inlet Elbow; Specify Tubing Size	.40
No. 77	—Straight Water Union; Model "G" Only	.35
No. 78	—Spray Nozzle; Specify Size of Drill	.20
No. 79	—Spray Nozzle Needle Valve	.25
No. 80	—Spray Nozzle Needle Valve Spring	.10
No. 82	—Eccentric Shaft Arm Bearing, Assembly	1.00
No. 86	—Eccentric Shaft Arm Bearing Taper Pin	.05
No. 90	—Constant Air Elbow	40
No. 91	—Dash Adjusting Arm Binding Post Screw	.05
No. 92	—Needle Lifter, Assembly	.20
No. 95	—Needle Valve Arm, Assembly	1.00
No. 101	—Float Chamber Screw Lock Washer	.05
No. 102	—Retaining Screw for Constant Air Elbow	.05
No. 114	—Dash Pot Cover Gasket	.10
No. 115	—Dash Pot Cover	.35
No. 115	—Elbow Water Union S. A. E.; Specify Tubing Size	.50
No. 156	—Straight Water Union S. A. E.; Specify Tubing Size	.50
No. 274	—Air Valve Cone Cotter Pin	.05
No. 290	—Priming Cap Lever	.10
No. 291	—Priming Lever Pivot Screw	.05
No. 308	—Gasoline Inlet Needle Sleeve	.25
No. 309	—Gasoline Inlet Needle Cap	.10

		Each
No. 328	—Gasoline Inlet Needle Seat	$0 40
No. 329	—Air Valve Cone Assembly	.80
No. 333	—Cam Shaft Tubing Holder	.15
No. 334	—Stop Arm Screw	.05
No. 504	—Strainer Body, Specify Size of Gasoline Connection	.45
No. 506	—Strainer Gauze, Assembled	.15
No. 510	—Strainer Retaining Plug	.40
No. 558	—Fulcrum Lever Pin	.05
No. 585	—Priming Cap, Assembly	.50
No. 662	—Inlet Needle Seat Gasket	.05
No. 663	—Strainer Body Gasket	.10
No. 664	—Strainer Retaining Plug Gasket	.10
No. 691	—Stop Arm Assembly	.25
No. 690	—Dash Pot Body Retaining Screw	.05
No. 757A	—Gas Arm, Old	1.25
No. 757B	Gas Arm, New	1.35
No. 782	—Dash Pot Assembly for Models G3, G4, GL3, GL4, L3, L4 and LL3	5 10
No. 783	—Air Valve Nut	.40
No. 784	—Square Meter Pin, Specify Size	.25
No. 784B	—Round Meter Pin; Specify Size	.30
No. 786	—Meter Pin Tube Spray Cap	.10
No. 787	—Meter Pin Spring	.10
No. 788	—Meter Pin Spring Retaining Plug	.10
No. 789	—Valve Link	.10
No. 797	—Valve Link Pin, Upper	.05
No. 798	Valve Link Pin, Lower	.05
No. 800	—Float Cover	.50
No. 801	—Float	.50
No. 802	—Gasoline Inlet Needle Valve	.25
No. 803	Fulcrum Lever, Per Pair	.25
No. 862	—Throttle Butterfly Valve	.25
No. 863	—Lower Butterfly Valve; Specify Size	.25
No. 864	—Needle Valve Arm Assembly; Raised Throttle	1.00
No. 865A	—Dash Pot Piston Assembly	1.00
No. 865B	—Dash Pot Piston Assembly	1 10
No. 865C	—Dash Pot Piston Assembly	1 10
No. 866	—Stop Arm Assembly; Raised Throttle	.25
No. 867	—Stop Arm Retaining Screw	.05
No. 868	—Automatic Air Valve Spring; Dash Pot	.10
No. 869	—Stop Arm Pawl	.05
No. 872	—Flushing Pan; Model G	.25
No. 873	—Flushing Pan; Model L	.25
No. 980	—Feed Pipe	.60
No. 1025	—Float Cover Cap	.25
No. 1054	—Priming Plunger Spring	.10
No. 1058	—Meter Pin Sleeve	.15
No. 1136	—Dash Pot Assembly, for Models G2, GL2, L2, LL2	5.10
No. 1253	—Priming Plunger Gasket	.10
No. 1254	—Priming Plunger Piston	.25
No. 1255	—Priming Plunger Nut	.30

RAYFIELD CARBURETOR SPECIFICATIONS

Name of Car	Model	Carburetor Model	Each
ABBOTT-DETROIT			
1914	K	G3	$34.20
1914	F	G4	39.25
1915		G4	39.25
1916	6-44	M2	25.00
ALCO			
1910	27	G3	36.00
1911	6-60	G4	38.50
1912-13-14	6-40, 4-40	G6	46.00
1915	6-60	G6	47.50
ALLEN			
1914-15	30-40	L2	28.75
1915	33-34-35	L2	24.15
1916	5	L2	23.00
APPERSON			
1913-14	6-45	G4	36.80
1913	4-35	G4	31.50
1914	4-45	G4	33.25
BRISCOE			
1915-16	25	B2	25.00
1916	24	L2	23.00
1916	38	L2	25.75
1917	21	MR2H	25.75
BUICK			
1914	B34-37 B54-55	G3	33.35
1914-15	B24-25 C24-25	G3	31.35
1915	C36-37 C54-55	G3	31.35
1916	D45-55	G3	31.35
1916-17	D44-45 D35	G2	27.55
CADILLAC			
1908-09-10	30	G3	28.75
1911	30	G2	28.75
1912	40	G3	35.75
1913	Touring	G3	34.00
1914	40-53	G4	37.25
1916	8 cyl 51-53	G4	38.05
CARTERCAR			
1913-14	5	G3	30.75
1913-15	9	G2	28.80
1915	Coupe	G3	31.05
CASE			
1914	S	G3	32.20
1915	30-R	G2	29.90
1916	25	G2	30.00
CHALMERS			
1914-15	6-36	G13	40.00
1914-15	6-34, 36	G14	35.80
1916-17	6-42	G12	25.80
1916-17	6-30 & 35-A	MR2	25.80
CHEVROLET			
1914-15	Classic 6-38	G3	35.00
1914-15	6-114	M2	25.00
1914-15-16	Baby Grand	L2	24.80
1915	Royal Mail	L2	24.55
1916	490	B2	23.00
COLE			
1914	6-60	G4	36.80
1914	4-30	G13	34.40
1915	6-60	G14	38.65
1915	4-40	G13	33.35
1915	6-70, 6-51	G13	33.50
1916	6	M2	23.55
1915-6-17	8 cyl	LL3	26.45
CROW-ELKHART			
1915	Crow Jr	B2	23.80
1915	48	L3	27.90
1916	CE 30 & 33	L2	24.15
DODGE			
1915-16	All	MR3H	25.60
DORT			
1915-16	5X	L2	24.60
EMPIRE			
1913-14-15	31-34-40	LL2	23.95
1916	45	MR3	25.80
1916-17	6-60	M2	25.00
FORD			
All Years	T(Magneto equipped)	B2	23.00
All Years	T	L2	23.00
GLIDE			
1913-14	36-42	GL3	32.15
1914-15	30	L2	25.20
1916	6-40	M2H	25.20
GRANT			
1914-15-16	M 4-cyl	L2	24.80
1915-16	6-T	L12	24.05
HAYNES			
1913-14	23-26, 28-32	G3	34.40
HOWARD			
1916	All Models	GL4	39.75
HUDSON			
1913	37	G3	34.10
1913-14-15-16	6-54	G4	41.40
1914	6-40	G4	32.50
1914-15-16	6-40 Light Six	M3	25.75
1916	Super 6	M3	27.05
HUPMOBILE			
1914	32	J	25.05
1914-16-17	All Models	MR3	26.20
IMPERIAL			
1914	4	GL4	19.90
1914	32	G4	34.55
1915	4-61	L12	26.45
1915	6-66	G3	34.80
INTERSTATE			
1915-16	4	L2	24.50
JACKSON			
1914	Olympic	GL3	36.20
1915	6-48	G4	38.75
1915	4-44	GL4	34.55
1916	6-68	M3	32.50
1916	34	M2	30.25
JEFFERY			
1915-16	6-96	G4	35.00
1914-15-16	4-63	G3	30.00
1915	22 Chesterfield	M2H	25.60
1916	J6	M3	27.05
1916	4-62	G3	32.15
1917	4-72	G3	34.30

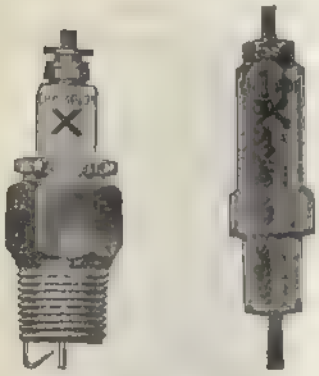
Name of Car	Model	Carburetor Model	Each
KING			
1914	B	G2	$26.70
1915	C	LL2	25.15
1916	Special	L3	32.45
KISSEL KAR			
1914	30	GL3	33.35
1914	48	G3	36.80
1914		G2	32.43
1915	6-45, 4-32, 6-42	M3	25.30
KRIT			
1912-13-14-15	A K, 40	L2	24.75
LEXINGTON			
1913	S4 K4	L3	28.10
1913-16	S	M3	27
1916	5	M2	25.10
191	6-P	G4	38.60
LOCOMOBILE			
1908-09-10	H & I	G4	40.25
1911-12-13	L	G4	39.44
1913	6-48	G4	38.75
1914	6-48	G4	40.80
1914	M3	G5	45.20
1914	48	G5	42.55
1914	54	G4	40.90
1914	M4	G5	45.20
1915-16	6-48	G5	45.15
1914-15-16	R 6-38	G14	39.00
LOZIER			
1911-12-13	6-51-72	G5	44.20
1911-13	6-61	G5	40.00
1913-14-15-16	6-72, 81, 82	G4	42.40
1914-15-16	6-34-84	G4	36.35
MARMON			
1910-11	32	GL3	35.00
1912	32	GL4	41.95
1913	32	G4	41.95
1914	6-48	G5	44.55
1913-14	34	G4	43.35
1914	6-41	GL4	39.65
1914	32	G4	43.35
1914	6-48	GL5	44.60
1915	6-48	G5	43.35
1915	6-48	G4	43.50
1916	6-84	G4	34.50
MAXWELL			
1911	30	L3	27.05
1911	40	L3	27.50
1912	25	L	26.20
1912-13	6-50	G4	35.80
1913	25	L2	27.60
1914	25	L2	25.55
1914-15-16-17	25	L2	26.60
MERCER			
1911-12-13	35 R, J, K	G5	45.60
1913-14	G H M	G5	45.15
1915-16	22-70, 22-72	G5	49.15
MOLINE KNIGHT			
1914-15-16	26-50-K-M-50	L3	30.30
1915	60	MR3	27.55
MONROE			
1915	4 Roadster	L12	24.25
1916	M-5	L2	23.80
MOON			
1913-14	49-4-42	G3	34.55
1913	48	G3	34.50
1915	48	GL2	29.50
NATIONAL			
1910-11-12	40	G5	44.70
1911-12	Speedster	G6	52.55
1913	Touring	G5	40.00
1913-14	Series V Roadster)	G5	42.55
1913-14	(Series V Touring)	G5	42.55
1914	6	G3	30.00
OAKLAND			
1913	6?	G2	34.00
1913	35	G2	25.45
1913	6-60	G4	38.90
1914	38-4	G2	26.75
1914	36	G2	28.95
1914-15	6-48, 6-49	GL3	34.75
1915-16	3	L2	25.50
1916	38	L2	24.70
1916	6-4, B	GL2	27.00
1916-17	8-50	LL3	26.50
OLDSMOBILE			
1912	30	GL3	30.00
1911-12	Autocrat	G4	33.25
1913	Roadster	G4	33.60
1913	Touring	G5	41.60
1913	Special	G5	41.80
1914	6-55	G4	36.95
1914	6-54	GL4	37.55
1915	6-55	G4	38.70
1915-16	42-44	G12	29.2
OVERLAND			
1913	79, E & F	LL3	30.90
1913-14	69-79	L12	28.80
1915	83-81-83	L2	28.35
1915	80 T & F	L12	28.35
1916	85	M3	25.15
1916	75	MR2	25.55
1916	85-83B	LL3	29.10
OWEN MAGNETIC			
1915	1915-6	G4	32.20
1915	Big 6	G4	35.45
1916	O 36 & M 25	G5	34.15
PACKARD			
1908-09-10-11-12	30	G4	41.00
1912	Roadster 18	G4	40.90
1912-13-14	6-48-38	G5	44.95
1913-14-15	6-38	GL4	41.95
1915	3-38	GL4	40.60
1916-17	Twin 6	G4	40.15
PAIGE			
1911	B & C	L2	25.95
1912-13	25	L2	25.55
1914	6-36	G2	27.15
1914-15	36	G2	29.35

Name of Car	Model	Carburetor Model	Each
PATERSON			
1914	43	G3	$35.75
1914-15	47	GL4	41.55
1914-15	42-3	G4	43.55
1915	37	G2	29.80
1915	6-48	G4	43.80
1916	6-42	G4	43.80
1916	6-37	M2	25.10
PATHFINDER			
1913	A B C D & F	L13	28.50
1914	1914	L3	27.55
1914-15	Leather Stocking	G4	35.35
1916	Twin 6	L4	30.50
1916	B A & B B 4	M3	25.15
PEERLESS			
1913	37	G4	44.00
1913-14-15	38	G5	51.40
1914	6-4	G5	51.10
1914	31	G4	48.50
1914	6-60	G5	52.25
1914	38-4	G4	44.35
1914-15	6-60-38	G5	46.95
1915	35	G4	42.75
1915	33	G4	41.55
1915-16	6-48	G5	45.35
1915	6-48	G5	44.35
1915	6-55	M3	25.35
1915	54	L2	25.00
PIERCE-ARROW			
1909-10-11-12	28-32	G5	36.60
1908-09-10	4-48	G4	37.35
1909	6-66	G5	41.20
1910	6-36	G5	34.00
1910	6-66	G6	46.85
1911	6-36	G5	37.60
1911-12	6-48	G5	44.60
12	66 T	G3	33.70
1912-13	6-66	G6	49.90
1913	48 B & D	G5	46.90
1914	6-48	G5	45.15
1914-15-16	6-38	G4	40.55
1914	1-35 & C3	G4	37.15
1915-16	48-33	G5	44.10
PREMIER			
1913	6-48	GL4	35.00
1913	6-40	G4	38.90
1913-14	6-60	G4	42.45
1914	X	GL3	36.50
1914-15	6-40	GL4	38.70
PULLMAN			
1914	4-36	L3	27.85
1914	6-60	G4	41.15
1914-16	4-32 & 24	LL2	25.45
REGAL			
1913-14	H	L3	30.00
1913-14	LN & NC	L4	29.00
1913	4	L3	28.40
1914	T		26.55
1915	4-44	L2	25.20
1915	Model	L13	27.05
1916	6	L2	25.90
1916	D	L3	26.95
REO			
1911-12-13-14-15	R the 5th	GL2	28.85
1913-16	6-M	GL3	31.85
1914	4-B	G2	25.85
1914-17	6-M	GL3	31.85
SAXON			
1913-14-15-16-17	A	M2	23.50
SCRIPPS-BOOTH			
1916	4 cyl	M3	24.95
SIMPLEX			
1909	4-50	G6	50.75
1911-12	4-50	G6	49.75
1912	38	G6	50.20
1913	4-38	G6	45.70
1914-15-16	D-50-75	GL4	41.45
1913-14-15	50	G6	48.15
STEARNS-KNIGHT			
1913	1913-4	G4	38.05
1913	1913 Knight	G4	55.85
1914	4	G14	38.05
1913-14-15	6	G4	37.00
1915-16	Battle 4	GL3	4.10
STUDEBAKER			
1913	S A 25	G4	29.10
1913	E-6A	G3	34.10
1913	AA	B2	26.05
1914	4	L2	20.50
1914	6	G3	34.50
1915	6-4	G3	34.80
1915	4-3	G3	30.00
1915-16-17	Series 16-17	GL3	33.00
1914-15	4-5	GL2	29.55
STUTZ			
1913	A 4	G4	33.85
1913-14	6-B	L4	33.85
1913-14-15-16	4-B	G4	33.85
1914	4-B	G4	39.55
1915	6-4 S	G2	29.35
1915	4-B S	L2	24.50
WHITE			
1911-12-13	C & F	GL3	34.70
1914	E & D	G4	36.45
1914	C & L	GL3	34.35
1914	A & J	L12	25.50
1915-16-17	6-40 H	G2	26.55
1915-16	6-40 D	L4	26.90
WILLYS			
1915	6-82	L3	35.25
WILLYS-KNIGHT			
1915	6-17-18	GL3	34.15
1916	84	MR3	27.15
WINTON			
1909-10-11-12-13	6-48	G4	37.90
1914	6	G4	38.35
1915	Light 6	G3	33.10

Marshall-Wells Hardware Co.

SPARK PLUGS

Approximately 75 per cent of all cars manufactured in the United States leave the factories equipped with Champion Spark Plugs. They are the recognized standard in the Spark Plug Field. Ford, Studebaker, Overland, Maxwell, Metz and over fifty others have adopted Champion Spark Plugs as their standard equipment. That means the type of Champion Spark Plugs used by them in their motors will give absolutely the maximum service, maximum power, maximum efficiency in every way.



CHAMPION X, FORD SPECIAL

Adopted by the Ford Motor Company as standard equipment on the Ford Car since 1911; Gun Metal Finish.

Each

No. X102—Champion "X," Ford Special, ½ in. Threads....$0 75

Weight ¼ Lb. Each

No. XP—Champion X Porcelains ..... .35

Weight 1 Oz. Each

CHAMPION, REGULAR ½ IN.
Porcelain Core

This type of Champion Spark Plug has been adopted by the Studebaker Corporation as standard equipment on all Studebaker cars since 1914. Used as factory equipment on 1913-1914 Overland cars; Also gives very efficient service in such cars as Krit, R. C. H., Regal and Reo; Blued Steel Finish.

Each

No. 132—Champion, Regular ½ in. Thread.....$1 00
No. 0132—Champion Overland Special, ½ in. Threads.... 1.00
No. S132—Champion Studebaker Special, ½ in. Thread. This Plug has one thread more than the Champion Regular and the Champion Overland Special 1.00

Note—The above three types of ½ in. Champion Plugs are interchangeable.

Weight ¼ Lb. Each

CHAMPION, REGULAR ⅞ IN.
Porcelain Core

Adopted by the Maxwell Motor Company as standard equipment on all Maxwell Cars. Will give maximum efficiency in such cars as Imperial, Interstate, Jackson, King, Paige-Detroit, Patterson, Saxon and Westcott; Blued Steel Finish.

Each

No. M108—Champion, Regular ⅞ in. Thread.....$1 00

Weight ¼ Lb. Each

CHAMPION, ⅞ IN. 18, BUICK SPECIAL

The Champion, ⅞ in., 18 Long Plug is specially made for the Buick Car. Has long shell, conical porcelain, Buick Universal Terminal. The long shell allows the spark to ignite within the cylinder instead of in a pocket as occurs when the ordinary type plug is used; Blued Steel Finish.

Each

No. B188—Champion, ⅞ in. 18, Buick Special.....$1.00

Weight ¼ Lb. Each

CHAMPION, ONE PIECE HEAVY STONE

Factory equipment on 1915 Overlands; Specially made for racing cars; Extra heavy material throughout; Absolutely compression tight; Gun Metal Finish.

Each

No. 112—Champion, One Piece Heavy Stone; ½ in. Thread $1.25
No. 118—Champion, One Piece Heavy Stone; ⅞ in. Thread 1.25

Weight ⅔ Lb. Each

CHAMPION, TWO PIECE HEAVY STONE

Extra Heavy material throughout; Can be easily taken apart and cleaned; Extra durable insulator; Gun Metal Finish.

Each

No. 122—Champion, Two Piece Stone, ½ in. Thread.....$1.25
No. 128—Champion, Two Piece Stone, ⅞ in. Thread..... 1.25

Weight ⅔ Lb. Each

EXTRA PORCELAINS

No. 22P—Heavy Stone Cores for above $0 60

CHAMPION, RELIANCE "SPARKS IN WATER"

The ideal spark plug for motor boat use; Moisture, fog and rain on the outside of this plug does not interfere with its operation; Then soot, carbon, etc., has no effect to short circuit; Blued Steel Finish.

Each

No. 142—Champion, Reliance "Sparks in Water", ½ in. Thread $1 00
No. 148—Champion, Reliance "Sparks in Water"; ⅞ in. Thread 1.00

Weight ¼ Lb. Each

CHAMPION, RELIANCE MAGNETO

Has closed end, conical porcelain, platinum point; Gives extra long service and high efficiency with magneto; Specially adapted to oily motors, as it absolutely will not foul from oil; Blued Steel Finish.

Each

No. 102—Champion, Reliance Magneto; ½ in. Thread...$1.25
No. 158—Champion Reliance Magneto; ⅞ in. Thread... 1.25

Weight ¼ Lb. Each

SPARK PLUGS

CHAMPION MOTOR CYCLE

Strong, extra heavy and exceedingly durable; Excessive heat or constant jolting will not injure them; Blued Steel Finish

	Each
No. 168—⅞ In. Mica Motor Cycle	$0 75
No. 170M—Metric Mica, Motor Cycle	.75

Weight ¼ Lb. Each

CHAMPION, REGULAR MICA

Core made from highest grade pure India Mica; General construction is same as Champion Regular; Blued Steel Finish.

	Each
No. 192—Regular Mica; ⅛ in. Thread	$1.00
No. 198—Regular Mica; ⅞ in. Thread	1.00

Weight ¼ Lb. Each

CHAMPION, METZ

Adopted as standard equipment in Metz cars; Has extra long shell, bringing the spark well down into the cylinder; Blued Steel Finish.

	Each
No. 202—Metz; ⅛ in. Extra Long Thread	$1 00

Weight ¼ Lb. Each

CHAMPION PRIMING

Will start any motor any time on the first quarter turn; Has key lock attached to needle valve for easy opening and closing; Brings the gasoline right at the sparking point; Blued Steel Finish.

	Each
No. 212—Priming; ⅛ in. Thread	$1 25
No. 218—Priming; ⅞ in. Thread	1.25

Weight ⅝ Lb. Each

EXTRA PORCELAINS

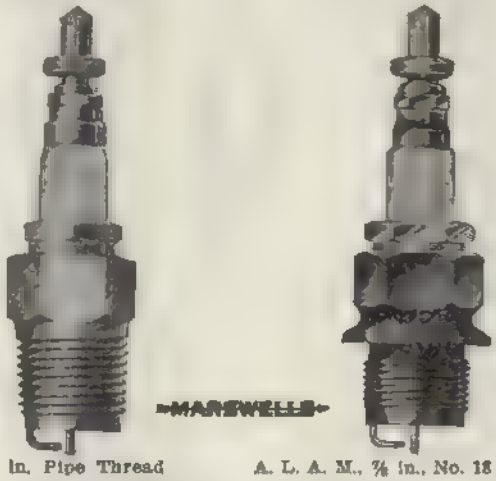
	Each
No. 212P—Priming Plug Cores	$0.40

CHAMPION, HEAVY DUTY

For use where compactness is necessary; the One Piece Construction makes leakage impossible; Built for Efficiency of the very highest type; One Piece; Blued Steel Finish

	Each
No. 150½—½ In.; Mica	$1.00
No. 150⅞—⅞ In.; 18 Threads Mica	1.00
No. 150M—Metric	1.00
No. 198½—¾ In. Mica, Gas Tractor Plug	1.00

One in Box; Weight ¼ Lb. Each



½ In. Pipe Thread — A. L. A. M., ⅞ In., No. 18 Thread

With Universal Terminal

Finest Quality Imported Porcelain; Will not short circuit or soot over; Can be easily taken apart for cleaning; Polished Finish

Guaranteed for One Year

	Each
No. 10—½ In. Pipe Thread, Porcelain Core	$0.50
No. 15—A. L. A. M., ⅞ In. No. 18 Thread, Porcelain Core	50
No. 30L—Marswells Ford Special, ⅛ In. Pipe Thread with Long Shoulder; Porcelain Core	.50

One in a Box; Weight ¼ Lb. Each

A C CICO

	Each
No. 2F—½ In. Ford Special	$0 75

One in a Box

Weight ¼ Lb. Each

A C TITAN, REGULAR TYPE

Standard Equipment for Cadillac, Cole, Jackson, Moline-Knight, National, Oakland (38x50), Stutz, Wescott and many others; One Piece; Gun Metal Finish.

	Each
No. 2TR—⅞ In.; Regular Type	$1.00

One in a Box; Weight ¼ Lb. Each

A C TITAN, LONG TYPE

Regular Equipment on Buick, Chevrolet, Enger 12 Cylinder, McLaughlin and Olds 4 Cylinder Cars; One Piece; Gun Metal Finish.

	Each
No. 2TL—⅞ In.; Long Type	$1.00

One in a Box; Weight ¼ Lb. Each

DODGE SPECIAL

Made especially for Dodge Bros. Car and is slightly longer than the Regular ⅞ In. Plugs; One Piece; Gun Metal Finish.

	Each
No. 1D—⅞ In.; Dodge Bros. Special	$0.75

One in a Box; Weight ¼ Lb. Each

BETHLEHEM FIVE POINT SPARK PLUGS

Guaranteed for the Life of the Car

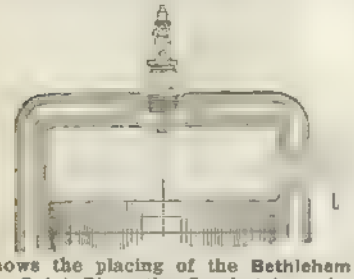
The Bethlehem is made with Highest Grade Cold Rolled Steel Shell, especially heat treated to remove warping qualities, a Brass Bushing threaded into the Steel Shell forms an absolutely compression tight joint.

One Piece Center Electrode. Wires cannot fall into the Cylinder, Prevents preignition because of the superior heat attraction of the heavier upper metal. All Electrodes are Nickel Wire; They will not pit or corrode due to high heat resisting properties

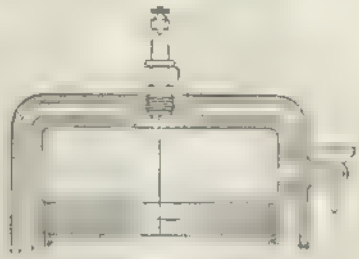
Four Available Sparking Points With the modern, high tension Magneto, Multiple Sparking Points are a necessity. If One Point is out of commission with the Multiple Pointed Bethlehem one of the other Points will immediately take up the spark; **One Point Always Sparks.**

The Electrodes of the Bethlehem project deep into the Cylinder; the result is to bring the spark directly into the center of the mixture at the moment of highest compression and the whole charge is exploded, All the gas burns, instead of part, giving a positive increase in horse power on less fuel consumption.

The porcelain is fired at a heat of 2800 degrees Fahrenheit; Its quality is guaranteed.



Shows the placing of the Bethlehem Five Point Plug—the Spark takes place in the Cylinder as it should



Shows the placing of the ordinary type of Plug—the Spark takes place in the Plug Chamber

TYPE A, FORD SPECIAL

Each

No. A—Heat Treated, Special Alloy Shell, Pure Nickel Electrodes, Highest Grade Insulation; the Special Design and Length of Steel Shell give protection to the Porcelain Insulation $1.00

One in a Carton Weight ⅛ Lb. Each

TYPE C, OVERLAND AND REO

Each

No. C—Especially designed for Overland, Winton and Reo Cars, Same General Construction as the Type A; the Shell is made of Special Alloy, Heat Treated; Electrodes are Pure Nickel and the Insulation is Highest Grade Porcelain $1.00

One in a Carton; Weight ⅛ Lb. Each

TYPE D, BUICK Each

No. D—For Buick, Stevens, Duryea and other similar Cars Heat Treated, Special Alloy Shell, Pure Nickel Electrodes, Highest Grade Porcelain Insulation; Fires directly into the center of the Mixture at the moment of highest compression, exploding all the gas, without waste $1.00

One in a Carton; Weight ⅛ Lb. Each

REGULAR TYPE

Each

No. R—Standard ½ in. Threads; For all Purposes; Heat Treated, Special Alloy Steel Shell; Pure Nickel Electrodes Highest Grade Porcelain Insulation.....$1.00

No. R1—⅞ in. A. L. A. M. Threads 1.00

One in a Carton

Weight ½ Lb Each

TYPE K, HEAVY DUTY

Each

No. K—⅞ in. 18 Threads; Heavy Porcelain Insulation of Highest Grade; Special Alloy Steel Shell Heat Treated; Pure Nickel Electrodes; Will answer every purpose for all heavy duty.....$1.50

One in a Carton

Weight ½ Lb. Each

ONE POINT SPARK PLUGS

No. 100

No. 200

BETHLEHEM ONE POINT SPARK PLUGS

Made with highest grade Cold Rolled Steel Shell, especially Heat Treated to remove warping qualities; a Brass Bushing threaded into the Steel Shell forms an absolutely compression tight Joint.

Each

No. 100—½ in. Standard Threads; For Ford and other Cars using ½ in. Plugs as Standard Equipment.....$0.60

No. 200—⅞ in. Regular S. A. E. Threads..... .60

One in a Carton; Weight ⅛ Lb. Each

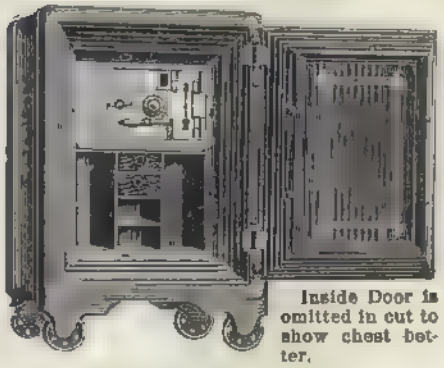
BURGLAR AND FIRE-PROOF SAFES

Entire page, F. O. B. Cincinnati, Ohio

Outer and inner boxes are constructed of wrought steel, the outside is one continuous wrought steel plate, bent to form top, sides and bottom, attached to heavy angle frames, making all corners round and a perfectly smooth surface, without panels. The space between boxes is filled with concrete cement, in semi liquid state, it permeates every crevice, then hardens into one solid mass. There is no corrosion or dampness, but when heated by fire the concrete generates a vapor which fills every pore and forms a cool, moist wall around the contents. Doors are stepped and flanged, secured by front and back bolts; non pickable combination lock on outside door with T handle, for bolt work (key lock if preferred), cylinder key lock on inside doors. Finished in black with handsome decorations; customer's name lettered on case, free.

With Inside Doors and Burglar Proof Chest

Independent steel chests, all angle bars 2x2 in., 5 ply welded iron and steel plates, twisted iron and steel screws, calendered steel bolts; the edges of the plates are ground true, for perfect fit, the walls are built from outside inward, no screw heads showing outside; door is 4 in. thick having 2 in. solid of alternate iron and steel plates, has crane hinges and closes with pressure bar, Combination Lock of 4 tumblers.



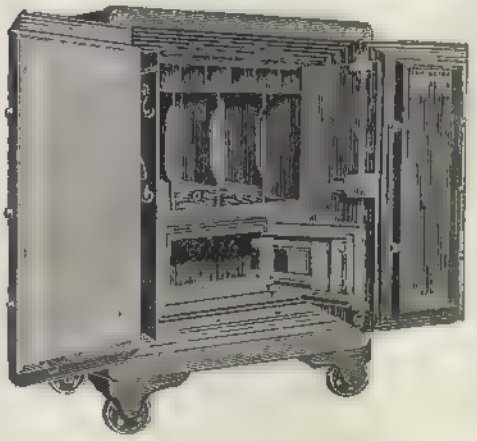
Inside Door is omitted in cut to show chest better.

SINGLE DOOR, Outside and Inside

The Inside Door does not show in cut, having been left out, the better to show the chest

Nos.	Each	Weigh Lbs.	Outside Meas., In. High	Wide	Deep	Inside Meas., In. High	Wide	Deep	Chest—Outside, In. High	Wide	Deep
345C	$300 00	1350	37½	26	26	32⅛	16½	14½	14	16½	12
345D	320 00	1550	31	28	26	26	18	14	14	16½	12
345F	370 00	2000	45½	31	30	25½	18½	15½	14	16½	12
345H	380.00	2300	47¼	31⅝	30	27½	19½	15½	14	16½	12
345K	400 00	2400	50⅛	32⅝	30	29¼	20½	15½	14	16½	12
345L	415.00	2500	52	33⅛	30	31½	21½	15½	14	16½	12

The first size has two drawers and two shelves; the others have two drawers, two pigeon holes and two book spaces.



DOUBLE DOOR, both Outside and Inside

Nos.	Each	Weight, Lbs	Outside Meas., In. High	Wide	Deep	Inside Meas. In. High	Wide	Deep	Chest—Outside, In. High	Wide	Deep	Drawers	Pigeon Holes	Book Spaces
345M	$490 00	3000	51	37	30½	30	26	16¾	14	26	13¼	2	4	3
345N	530.00	3400	55	40½	31½	34	28	16¾	14	26	13¼	2	4	3
345P	570 00	3600	68	38	31	48	26	16¾	14	26	13¼	3	16	3
345R	650 00	3300	60¾	36½	31½	39½	23¾	16¾	14	16½	13¼	2	5	3
345S	590 00	4000	64	42	31	43	29½	16¾	14	26	13¼	2	13	3
345T	600 00	4700	62	45½	32	39½	31½	17	14	26	13¼	2	7	4
345V	1000 00	6200	72½	53½	34	50	40	18	17	40	15	5	20	4
345W	1160 00	7500	82	62	35	56	46	19	17	40	15	6	21	7

All Above are Sold for Prompt Shipment from Factory

FIRE-PROOF VAULT DOORS

Every office keeping a large number of records, account books, valuable papers, etc., should have a Fire-Proof Vault.

Business ethics require it and the insurance companies demand such protection.

With these Vault Doors, a fire-proof vault can be built for less money than a large safe would cost and give more storage room than twenty such.

Build on a solid stone foundation, walls four bricks thick with 1 in. air space down the center; make a crown or arched roof, stayed with Roof Bolts about every two feet; these would prevent caving of vault if walls were to fall on it. The Door Opening in wall should be 79 in. high, 32 in. wide by 20 in. thick.

Door Construction—Heavy angle bars panel the outside door and form bolt case; there are 4 cross and 1 up and down bolts, of 1 in. cold drawn steel on the outer; and up and down flat bolts on the inner doors. The opening in door frame is 76x28x20 in. deep; doors are hung on two heavy hinges; with combination lock outside and flat key lock inside; Handsomely Decorated. Purchaser's name lettered free of charge. Larger or Smaller Sizes can be Built to Order.

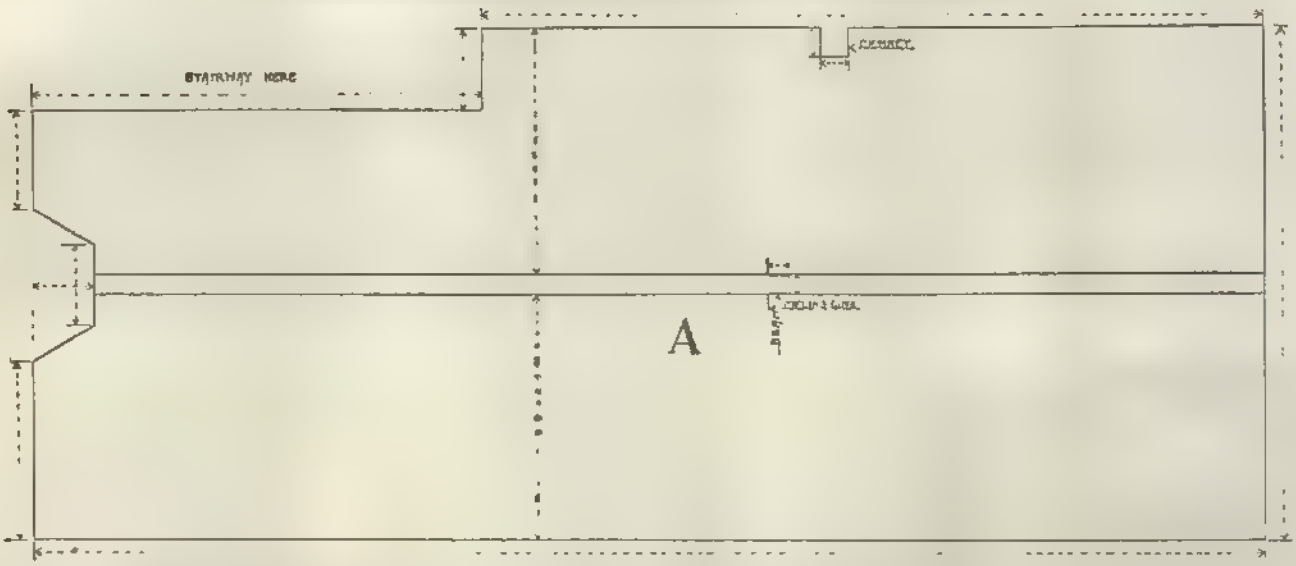
Each

No. 345X—(2) Outside Door ⅜ in. Steel Plate, Border 2x2x⅜ in Angle Steel; Door Frame 3x⅜ in.; Inside Doors of No. 16 Steel with 2x⅜ in. Panels; Vestibule of No. 16 Steel with 1½x1½x⅜ in. Supporting Angles; Weight 650 Lbs..... $180.00

No. 345Y—(6) Same Size as Above, but Heavier and with Ornamental Molding; Outside Door of ¼ in. Steel Plate, Border 2x2x¼ in. Angle Steel, Door Frame 3x¼ in.; Inside Doors of No. 14 Steel with 2x⅜ in. Panels; Vestibule of No. 14 Steel, with 1½x1½x¼ in. Supporting Angles; Weight 875 Lbs. 210.00

Above are Sold for Direct Shipment from Factory

ORNAMENTAL STEEL CEILINGS



The above diagram showing shape of the average store room is taken as an example

HOW TO FIGURE THE AREA

We will assume that the room measures 40x30 feet, and also that the cornice to be used drops down on sidewall 12 inches, and the beam through the center drops down 6 inches from the ceiling. To ascertain the number of square feet of material to cover this room, add twice the drop of the cornice to both the length and width of the room and add twice the drop of the beam to the width of the room and multiply the result together as follows:

	Width	Length
Size of Room	20 Ft.	40 Ft.
Cornice (1 ft. drop on each side)	2 Ft.	2 Ft.
Beam (6 in. drop on each side)	1 Ft.	
Total	23 Ft.	x 42 Ft.=966 Sq. Ft.

This gives you a total of 966 square feet, which must be multiplied by the price per square to arrive at your cost of material, to which must be added the cost of labor for erecting, strips, etc.

Make no deductions for skylights containing less than 100 square feet nor for any openings such as stairways, chimneys or projections less than 50 square feet, because the extra cornice, mitres, border, etc., necessary around such places, and the waste of material by cutting to fit, will offset the material eliminated.

HOW TO FIGURE PRICE OF STEEL CEILING

It is a simple matter to figure your cost if the instructions given herewith are carefully followed; but to avoid any possible error it is advisable when time will permit to write us for a price before quoting. Send us a sketch as explained in next paragraph with exact measurements and we will quote price, with suggestions and blue prints if necessary.

When you cannot wait to secure a figure from us, you arrive at approximately your correct cost as follows: First, calculate the total square feet of material needed, including cornice, beam covering, etc., as explained in previous paragraph and then multiply this amount, which in the example above was 966 square feet, by whatever list price applies, on the design selected, for a room containing the same number of square feet of ceiling material (Note—We say square feet of ceiling material and not square feet of ceiling surface. A room 20x40 feet, with a 12-inch cornice and a 6-inch beam requires 966 square feet of ceiling material but has only 800 square feet of ceiling surface.) Be sure you multiply by the correct list price and then deduct the discount and you will have your approximate net cost.

The cost of erecting varies from $2.00 to $5.00 per square, depending on the size of the room, projections, irregularities, etc.

The weight of metal ceiling and sidewalls crated for shipment is about 70 Lbs. per 100 square feet and takes the fourth class rate of freight.

HOW TO ORDER STEEL CEILINGS

It is absolutely necessary that you give all measurements and information accurately, otherwise the ceiling when shipped will not fit.

Send us architect's blue print if you have one, or make a sketch of ceiling (not necessarily to scale) using Fig. A as an example, and giving measurements of dotted lines. Give accurately all measurements showing size and location of all angles, offsets, or obstructions, such as stairways, door entrances, elevators, chimneys, beams, girders, posts, skylights, etc. Measure all sides of room, as opposite sides frequently vary. Check your figures over to see that subdivided measurements equal the total length and width of the room

State whether beams are to be covered with steel ceiling or not and whether they are made of iron or steel. Also whether elevators and stairways are enclosed or open

In store buildings there is usually no room for a cornice across the front on account of the glass running up close to the ceiling, but there are exceptions to this rule, so be sure to give us the distance between top of sash and the ceiling. In case there is no space for a cornice across the front the cornice along the sidewalls can be stopped against the front or returned against the wall. Give also the distance from side and end wall window casings to ceiling so we will know what depth cornice can be used

If you want us to figure on the erecting, state whether ceiling is applied over joists, old plaster or on sheathing, which way the joists run and the height of the ceiling.

Remember that our prices, plans, etc., are all based on information you furnish us so you must be absolutely correct. To alter a ceiling afterwards means a delay and a patched up job.

WHAT OUR PRICES INCLUDE

Our prices on ceilings include all cornice and cornice mitres, wood brackets, and nails for ceiling and sidewall. Prices do not include wood furring strips. They are charged for extra and are never shipped unless specified.

Prices on combination sidewall designs do not include cornice, as this is usually sold with ceiling. If wanted it will be charged for extra.

WHAT WE FURNISH

We furnish all material necessary according to plans and measurements furnished us, including cornice, miters, wood brackets (one for each section of cornice) and nails for ceiling and sidewalls. Mitres are made in one piece. Metal is primed one coat of paint before shipping. We do not furnish wood furring strips unless specially ordered.

We furnish blue prints with ceilings showing you exactly how the material is to be erected. We will not be responsible for shortages occurring from erecting steel contrary to our instructions and plans, nor from incorrect measurements furnished us.

We also furnish an itemized list of all material shipped. Immediately upon receipt of a shipment you should check back every box and crate with the bill of lading to see that no crates have been lost in transit and then check back every piece of material against our itemized list to see that you receive all you are charged. Our shipments are checked and counted twice by experienced men before leaving our factory.

PAINTING

We paint all material one coat of grey primer before shipping. After erecting two coats of paint are required. The second one is for shading and blending.

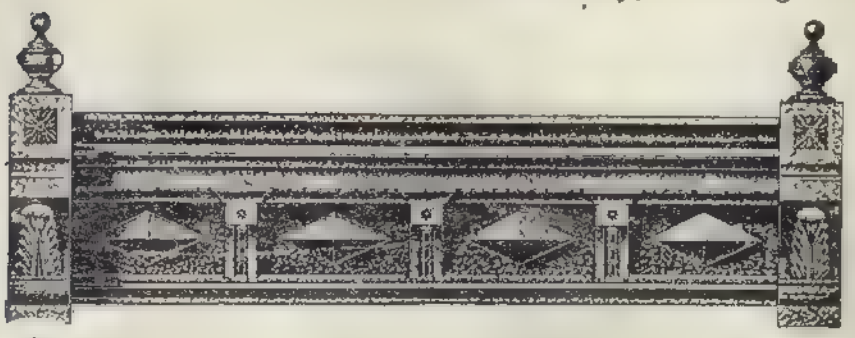
SIDEWALLS

To ascertain the number of square feet of sidewall material needed for a room take the height of the wall, and multiply it by the belt measurement or total length of the walls to be covered. Make no deductions for doors or windows unless unusually large, because the waste of cutting material to fit practically equals the space not to be covered.

Cornice is usually furnished with ceiling so we do not supply it with sidewalls unless specially called for, in which case it is charged for extra, because it is not included in our price on side-

MAIN CORNICES

Made to Order Only, of 28 Gauge Galvanized Steel



No. 201—Height 36 in., Projection 30 in.

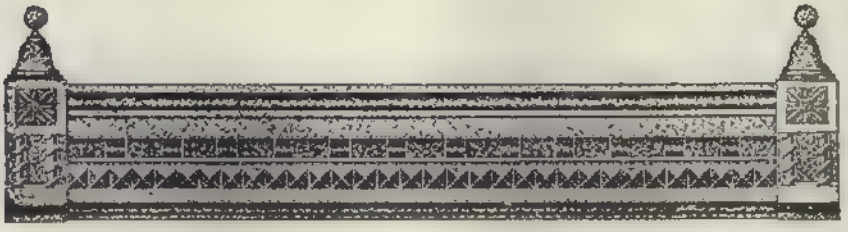
	Per Foot
Main Cornice	$1.95
	Each
End Blocks	$5.50
Urns	2.00

No. 203—Height 24 in., Projection 12 in

	Per Foot
Main Cornice	$1.20
	Each
End Blocks	$4.75
Urns	1.45

No. 205—Height 22 in., Projection 12 in.

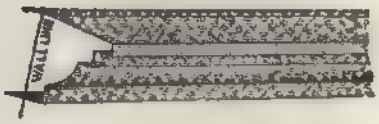
	Per Foot
Main Cornice	$0.95
	Each
End Blocks	$4.00
Urns	1.45



No. 206—Height 26 in., Projection 12 in.

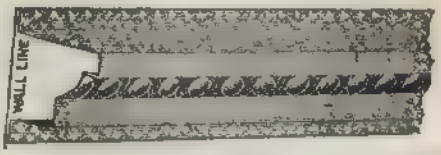
	Per Foot
Main Cornice	$1.20
	Each
End Blocks	$4.50
Urns	.90

LINTEL CORNICES



Per Foot
No. 10—Height 4 in.; Projection 3½ in.; Girth 12 in. $0.18
Weight 1 Lb. per Foot

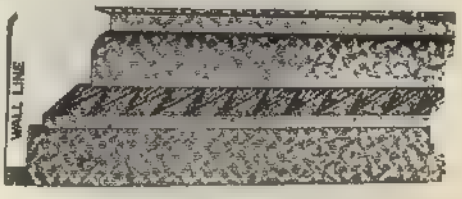
Per Foot
No. 11—Height 4 in.; Projection 3¾ in.; Girth 14 in. $0 21
Weight 1 Lb. per Foot



Per Foot
No. 12—Height 7 in.; Projection 5 in., Girth 18 in. $0 40
Weight 1¼ Lbs. per Foot

Per Foot
No. 13—Height 4¼ in.; Projection 3½ in.; Girth 12 in. $0.18
Weight 1 Lb. per Foot

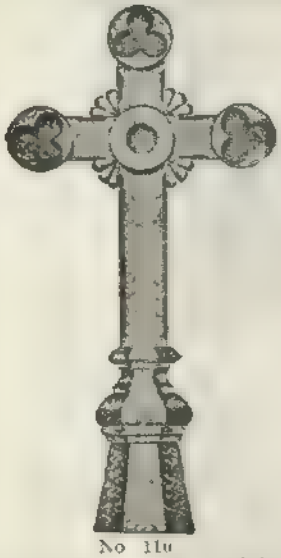
Per Foot
No. 14—Height 7 in.; Projection 4½ in.; Girth 16 in. $0.24
Weight 1¼ Lbs. per Foot
Shipped Strongly Crated



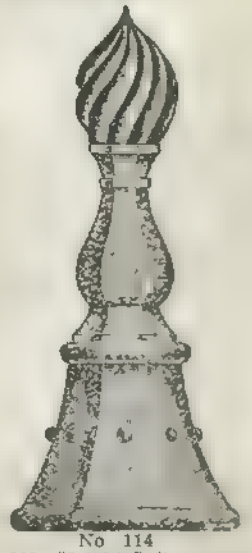
Per Foot
No. 15—Height 8 in ; Projection 6 in ; Girth 20 in. $0.45
Weight 1½ Lbs. per Foot

GALVANIZED FINIALS

No. 109



No. 110



No. 114

No. 120

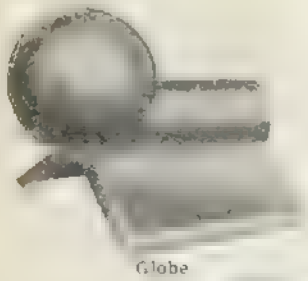
	Each
No. 109—Height 5 ft.	$13.00
Weight About 25 Lbs. Each	
No. 110—Height 5 ft.	$30.00
Weight About 45 Lbs. Each	
No. 114—Height 5 ft.	$20.00
Weight About 35 Lbs. Each	
No. 120—Height 4 ft. 6 in.	$28.00
Weight About 50 Lbs. Each	

GLOBE FINIALS

For Plain Ridge Roll

	Per Dozen
No. M4—For 1½ in. Ridge Roll	$6.00
No. M5—For 2 in. Ridge Roll	6.00

Weight About 1 Lb. Each



Globe

LITTLE BEAUTY FINIALS

	Per Dozen
No. 1046—Galvanized Ridge Finial; Height 9 in.; Length 10 in.; Made regularly to fit 2 in. Ridge Roll. It is adjustable however for 1½ in. to 3½ in. Ridge Roll; Should be soldered on to roll	$6.50

Weight 1 Lb. Each

Little Beauty

UNITED STATES SPARK ARRESTERS

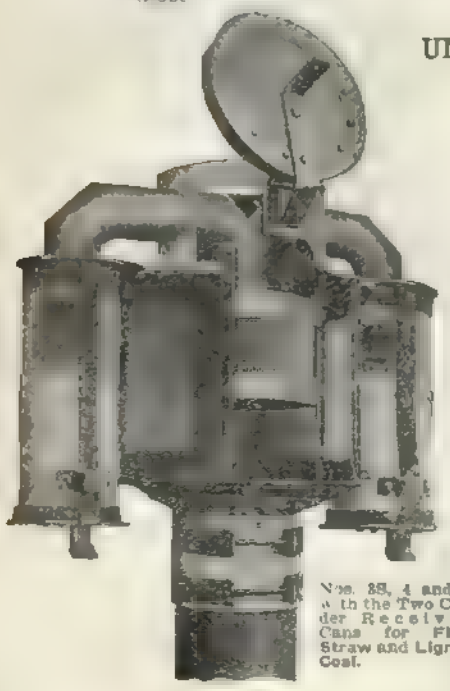
Painted Black; With Black Wire Screen

For Use on Threshing Engines; Lessens danger of fire, and protects both the thresherman and the farmer.

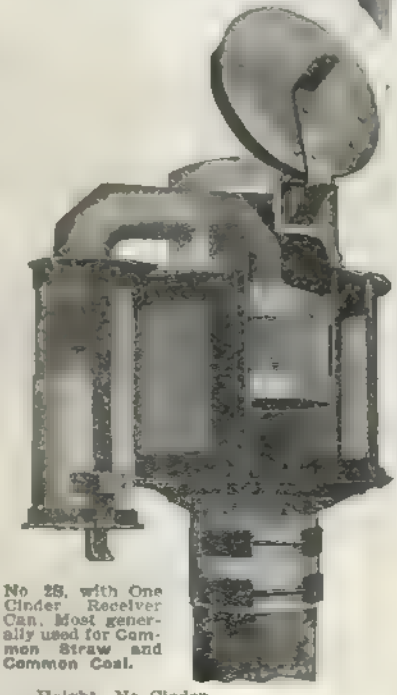
One of these Spark Arresters on an Engine will catch the sparks and cinders without interfering with the Draft of the Engine; They have been tested under the most severe conditions and have proven entirely satisfactory; the Cone Screw is raised about 10 in. from the Base, giving it free and easy draft; Another reason why this Spark Arrester does not stop the draft is because a large part of the exhaust is driven through the Pipe, with the cinders into the Receiving Cans.

HOW TO ORDER

Give Name of Engine and the Diameter of the Smoke Stack Inside and Outside at the Top. Also 16 in. below the Top Inside. Be sure to state what kind of Fuel you burn, also draw a sketch of your Smoke Stack. Should a new Stack be desired, give Base Dimensions of same.



Nos. 3S, 4 and 6, with the Two Cinder Receiving Cans for Flax, Straw and Lignite Coal.



No 2S, with One Cinder Receiver Can. Most generally used for Common Straw and Common Coal.

	Designed for Engines	Designed for Fuel	Width of Spark Arrester, In.	Height of Body Screen, In.	No. Cinder Receiving Cans	Weight Lbs., Each	Each
No. 2S	Under 30 H. P.	Common Straw and Common Coal	20	18	1	60	$18.00
No. 3S	Over 30 H. P.	Flax Straw and all other kinds, Common Coal, Bark and Wood	20	18	2	70	22.00
No. 4	Under 40 H. P.	Lignite Coal, Bark and Wood	20	18	2	80	24.00
No. 6	Over 40 H. P.	Lignite Coal, Bark and Wood	24	20	2	90	34.00

ELECTRIC LAMP GUARDS

For use in Mills, Factories, Shops, Stores, Warehouses, Barns, wherever there are Drop Lights liable to swing against or be struck by Hard Objects

PROTECTOR

Will stand the roughest usage. Made with a cushion of piano spring wire which takes the jar and prevents the lamp from coming in contact with the outer wire guards; can be dropped on floor without injury and will stand alone; easily attached; Made with 12 No. 13 B. & S. Wires.

For use with Standard Edison Sockets

	Per Dozen
No. 1429—For 16 Candle Power Lamps	$3.00
No. 1430—For 32 Candle Power Lamps	3.50

For use with Weatherproof Sockets

	Per Dozen
No. 1432—For 16 Candle Power Lamps	$3.00
No. 1434—For 32 Candle Power Lamps	3.50

One Dozen in a Box; Weights, 16 C. P. 2⅛ Lbs., 32 C. P. 3⅛ Lbs.

HOLDFAST

Has a Trap which fastens over the Bottom, preventing Lamp from being stolen; Lamp can be replaced without disturbing Guard; a spiral wire cushion takes all the jar and vibration; the downward rays of light are not obstructed; easily attached; will stand on end; cannot be pulled off; durable, rigid, compact and neat.

For Use with Weatherproof Sockets

	Per Dozen
No. 114WP—For 16 Candle Power Lamps; Complete with Trap for covering Bottom	$4.70
No. 117WP—For 16 Candle Power Lamps; Made with 12 No. 17 B. & S. Wires	4.20

For Standard Edison Sockets

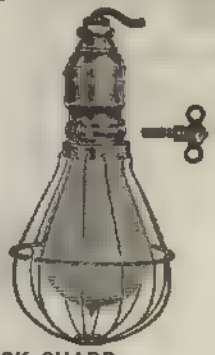
No. 117B—For 16 Candle Power Lamps; Made with 12 No. 17 B. & S. Wires	4.20

One Dozen in a Carton; Weight 3 Lbs. per Dozen

NOTE—In Ordering for Weatherproof Sockets, specify make and number of Socket

Lock Guard Lamp cannot be removed by an unauthorized person, as the Guard Locks to the Socket with Key; Gives perfect protection against breakage of Lamp.

One Key with every Dozen Guards.



LOXON LOCK GUARD

For Standard Edison Sockets

	Per Dozen
No. 1425—For 16 C. P. Carbon and 25 Watt Mazda Lamps	$6.00
No. 1426—For 32 C. P. Carbon and 40 Watt Mazda Lamps	6.30

For Weatherproof Sockets

No. 1427A—For 16 C. P. Carbon and 25 Watt Mazda Lamps	6.30
No. 1428A—For 32 C. P. Carbon and 40 Watt Mazda Lamps	6.50

One Dozen in a Box; Weights, 16 C. P. 2⅛ Lbs.; 32 C. P. 3⅛ Lbs.

For Standard Edison Sockets

	Per Dozen
No. 2443—For 60 Watt Tungsten Lamps	$9.60
No. 2444—For 100 Watt Tungsten Lamps	10.80

For Weatherproof Sockets

No. 2445A—For 60 and 100 Watt Tungsten Lamps	$10.80

	Each
No. 361K—Extra Keys for above	$0.10

NEVER BREAK

The Coil Spring Clasp needs no Shade Holder; Silver Luster Wire, no screws to loosen or fall out.

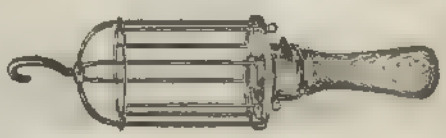
	Per Dozen
No. 11-16—For 16 C. P. Lamps; 4½x3 in.	$2.00

Two Dozen in a Box; Weight 3¼ Lbs. Box

No. 12-32—For 32 C. P. Lamps; Size 5x3½ in.	3.50

One Dozen in a Box; Weight 2 Lbs. Box

LAMP GUARDS



BULL DOG PORTABLE

For Heaviest Work in Engine Rooms, Machine Shops, Round Houses, Breweries, etc.

No. 4675—Takes Either 16 or 32 C. P. Lamp; Copper Plated, Bessemer Steel Standard Key Socket; Complete with Key Socket imbedded in Handle	$3.00

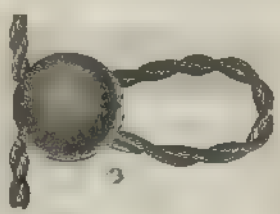
One in a Carton; Weight 1⅛ Lbs. Each

CRESCENT PORTABLE

A light but strong and convenient portable built to withstand hard usage, which can be recommended to give unusual service; Takes any ⅝ in. Standard Brass Socket but is furnished without socket.

	Each
No. 4645—For 16 C. P.	$2.00
No. 4676—For 32 C. P.	2.20

One in a Carton; Weight 1 Lb. Each



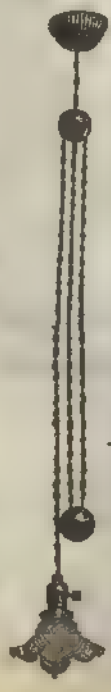
	Per 100
No. 361B—Ball; 1¼ in. Diam., Black Enameled Wood	$1.10

	Per 100
No. 361P—Peanut; 1½x1½ in., Black Enameled Wood	$1.20

Needs no Disconnection of Socket when Applying

Open Stock

LAMP CORD ADJUSTERS



TWO BALL

Light where you want it; in the Office, Workroom, Library, Kitchen, Sick-room, etc.

The Two Ball Adjuster is a Simple, but efficient Device that enables you to move an Incandescent Drop Light up or down any distance from one to a dozen feet, and automatically maintains it at the desired height; there is nothing to fasten or unfasten, nor to adjust, nothing to touch but the Lamp—you simply place it where you want it and the Adjuster does the rest; Can be attached to any ordinary Drop Light; made of Iron, Diam. 2¼ in.

Style B is for Offices, Residences, Hotels, Public Institutions, etc., where Beauty as well as Utility is essential

Style A is for Stores, Factories, Shops, Warehouses, etc.

	Per Pair
No. BNP—Style B; Nickel Plated Finish	$2.20
No. BBB—Style B; Brushed Brass Finish	2.20
No. BOC—Style B; Oxidized Copper Finish	2.70
No. A—Style A; Black Finish.	1.40

Note—Price includes the 2 Balls only shown in cut. Cord, Sockets, Globe, Lamp and Canopy are not included.

One Pair in a Box; Weight 2 Lbs. per Pair

EVEREADY ELECTRIC FLASH LIGHTS

WITH TUNGSTEN BATTERIES AND MAZDA BULBS

Vest Pocket, Nickel and Silver Cases

VEST POCKET SIZE

Each

No. 6981—Size 2⅞x1⅝x⅝ in., Nickel Plated; 2½ Volt Lamp, with No. 750 Tungsten Battery, and No. 1180 Mazda Bulb $0.75

Weight 4 Oz. Each

VEST POCKET SIZE

Each

No. 6981—Size 3x1⅝x⅝ in., Silver Plated; 2½ Volt Lamp, with No 750 Tungsten Battery, and No. 1180 Mazda Bulb $1.25

Weight 6 Oz. Each

VEST POCKET SIZE

Each

No. 6962—Size 2⅞x2x⅝ in., Nickel Plated; 3⅝10 Volt Lamp, with No. 751 Tungsten Battery, and No. 1181 Mazda Bulb $1.00

Weight 5 Oz. Each

CIGARETTE CASE STYLE

Each

No. 6991—Size 3¼x1⅞x⅝ in., Nickel Plated; 2½ Volt Lamp, with No. 750 Tungsten Battery, and No. 1180 Mazda Bulb.$1.00

Weight 3½ Oz. Each

No. 6992—Size 3¼x2⅜x⅝ in., Nickel Plated; 3⅝10 Volt Lamp, with No. 751 Tungsten Battery, and No. 1181 Mazda Bulb. 1.25

Weight 5 Oz. Each

PISTOL STYLE

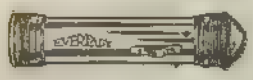
Each

No. 2675—Pistol Light; Perfect Model of an Automatic Magazine Pistol; Gun Metal Finish, with No. 750 Tungsten Battery, and No. 1180 Mazda Bulb; Length 3½ in.....$1.50

Weight 5 Oz. Each

NICKEL PLATED TUBULAR FLASH LIGHTS

Guaranteed Not to Short Circuit



BABY TUBULAR

Each

No. 2630—Size 1¼x5 in.; Nickel Plated, 2⅞10 Volt Lamp; With Tungsten Battery No. 791 and Mazda Bulb No. 1183 .....$1.25

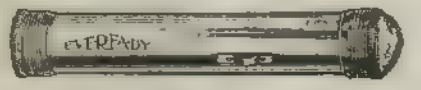
Weight 6 Oz. Each

TWO CELL TUBULAR

Each

No. 2631—Size 1½x6½ in.; Nickel Plated; 2⅝10 Volt Lamp; With Tungsten Battery No. 790 and Mazda Bulb No. 1198 .....$1.50

Weight 12 Oz Each



THREE CELL TUBULAR

Each

No. 2632—Size 1½x8½ in.; Nickel Plated; 3⅝10 Volt Lamp; With Tungsten Battery No. 705 and Mazda Bulb No. 1193 .....$1.75

Weight 15 Oz. Each

MINERS'

Each

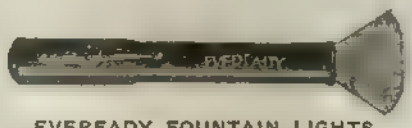
No. 2633—Size 1½x8½ in.; Nickel Plated; 3⅝10 Volt Lamp; With Tungsten Battery No 705 and Mazda Bulb No. 1193 $2.40

Weight 20 Oz. Each

Each

No. 2634—Size 1½x6½ in.; Nickel Plated; 2⅝10 Volt Lamp; With Tungsten Battery No. 790 and Mazda Bulb No. 1198.$2 00

Weight 16 Oz. Each



EVEREADY FOUNTAIN LIGHTS

An exact imitation of a Fountain Pen with barrel, cap and clip; simple in construction, and no mechanism to get out of order; Size 5¼x⅝ in.

Each

No. 2681—Black Finish; Complete with No. 706 Battery and Mazda Bulb No. 1180 .....$1.00

No. 2682—Nickel Plated; Complete with No. 706 Battery and Mazda Bulb No. 1180 ..... 1.00

Weight 2 Oz. Each

No. 706—Extra Battery, for above... ..... .25

For Extra Bulbs, See Page 362-2

For Batteries and Bulbs, for above Lamps, See Page 362-4

EVEREADY FLASH LIGHTS, BLUBS AND BATTERIES

Fibre Cases

BABY TUBULAR, FIBRE

No. 2602—Size 5x1¼ in., Vulcanized Fiber; 3 7/10 Volt Lamp; With Tungsten Battery No. 791 and Mazda Bulb No. 1183 ..... $1.00
Ten in a Box; Weight 6 Oz. Each

TWO CELL TUBULAR, FIBRE

Each
No. 2604—Size 6½x1½ in., Vulcanized Fiber; 2 9/10 Volt Lamp; With Tungsten Battery No. 790 and Mazda Bulb No. 1198 ..... $1.20
Ten in a Box; Weight 12 Oz. Each

THREE CELL TUBULAR, FIBRE

Each
No. 2612—Size 8½x1½ in., Vulcanized Fiber; 3 9/10 Volt Lamp, with Tungsten Battery No. 705 and Mazda Bulb No. 1193..... $1.40
Ten in a Box; Weight 15 Oz. Each

TWO CELL MINERS', FIBRE

Each
No. 2616—Size 6½x1½ in., Vulcanized Fiber, 2 9/10 Volt Lamp, With Tungsten Battery No. 790 and Mazda Bulb No. 1198 ..... $1.50
One in a Box; Weight 16 Oz. Each

THREE CELL MINERS', FIBRE

Each
No. 2619—Size 8½x1½ in. Vulcanized Fiber, 3 8/10 Volt Lamp; With Tungsten Battery No. 705 and Mazda Bulb No. 1193 ..... $1.70
One in a Box; Weight 20 Oz. Each

TWO CELL, CLOTH

Each
No. 2625—Size 6½x1½ in., Alligator Cloth 2 9/10 Volt Lamp, with Tungsten Battery No. 790 and Mazda Bulb No. 1198..... $0.95
Ten in a Box; Weight 12 Oz. Each

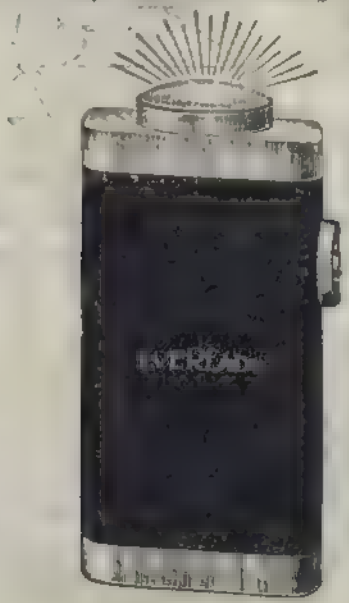
PORTABLE TUNGSTEN SEARCHLIGHTS

Especially designed for Firemen, Policemen, Motorists and Trainmen; Gives a particularly brilliant and penetrating light; This Portable Searchlight is equipped with specially designed, extra large Polished Silver Reflector and Lens

Each
No. 2659—Size 8½x1½ in., with Tungsten Battery No. 705, and Mazda Bulb No. 1193..... $3.00
One in a Box; Weight 22 Oz. Each

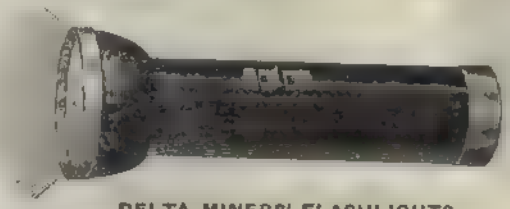
No. 2653—Size 13x1½ in., with Tungsten Battery No. 715 and Mazda Bulb No. 1195 ..... 4.00
One in a Box; Weight 31 Oz. Each

Each
No. 715—Extra Battery, for No. 2653 Searchlight. $0.70
No. 1195—Extra Bulb, for No. 2653 Searchlight..... 13



COAT POCKET SIZE

No. 1991—Size 5x2¼x1½ in., Black Cloth Covered; Nickel Plated Trimmings; 2½ Volt Lamp, with Tungsten Battery No. 793, and Mazda Bulb No. 1197..... $1.25
Ten in a Box; Weight 16 Oz. Each



DELTA MINERS' FLASHLIGHTS

No. 3—Size 6½x1½ in., Black Enameled Steel Case, Nickel Trimmings; 2 9/10 Volt Lamp, No. 1198, with No. 890 Battery. $1.20
Ten in a Box; Weight 16 Oz. Each

DELTA TUBULAR FLASHLIGHTS

No. 36—Size 6½x1½ in., Black Enameled Steel Case, Nickel Trimmings; Non-Short Circuiting; Positive Sliding Contact Switch; Lens is made of the finest Lens Glass; 2 9/10 Volt Lamp, No. 1198; Complete with No. 890 Battery..... $0.75
Ten in a Box; Weight 14 Oz. Each

BATTERY TESTERS

COAT POCKET SIZE

A Handy Light to carry and powerful enough for all ordinary purposes; Size 3½x2¾x1 in.; Complete with No. 703 Battery and No. 1190 Mazda Bulb.

Each
No. 6909—Vulcanized Fiber Case $1.50
No. 6904—Snake Cloth Covered Case 1.00
Ten in a Box

EVEREADY

Each
No. 6291—Tungsten Battery Tester, used in testing Flashlight Batteries; Complete with 3.5, 3.8 and 5.5 Volt Mazda Bulbs..... $1.35
One in Box; Weight 1 Lb. Each

ELECTRIC LANTERNS AND BATTERIES

EVER READY HOUSE LAMP

A Hand Lantern for the Home, Farm, Store, etc.; Light in Weight. Attractive in Appearance. Beautifully Finished in Full Nickel Plate; Strong and Durable Construction; Will last for Years; Is fitted with a Silver Plated Parabolic Reflector which throws a Stream of Brilliant White Light.

Each

No. 4706—Size 4x2¾x2½ in.; Complete with Mazda Lamp No. 1193 and with Tungsten Battery No. 703; Wt. 8 Oz. $2.00
No. 4707—Size 4¾x4½x3½ in.; Complete with Mazda Lamp No. 1199 and with Tungsten Battery No. 734; Wt. 12 Oz. .. 3.50
No. 1199—Renewal Bulb; for No. 4707 Lamp 13
No. 734—Renewal Battery; for No. 4707 Lamp. . . .. .45

NEW DELTA ELECTRIC HAND LAMP

For Housekeepers, Farmers, Deliverymen, Plumbers, Storekeepers, Night Watchmen, Railroad Men, Garage Owners, Inspectors, Firemen, Fishermen, Hunters, etc.

This Lamp takes a Standard 6 in. Dry Cell and will give 30 to 40 Hours Continuous Light. When used at short intervals a Battery should last for three months.

Each

No. 7—Gun Metal Finish; With Triple Silver Plated Spot Light Reflector, which throws a Powerful Light; Complete with all Connections, ready for use, excepting Battery; Weight without Battery 10 Oz. Each $1.25
No. 500—Full Nickel Plated, same as above excepting that it is fitted with a Reflector which transmits diffused Light, same being more suitable for indoor use where a diffused light is desired $1.75

DELTA PHOTOGRAPHERS LAMP

Each

No. 9—Gun Metal; Similar to No. 7 Hand Lamp, but fitted with Orange Bulb and Ruby Lens, giving the necessary light for use in dark room; Complete with all Connections ready for use, excepting Battery; Weight without Battery, 10 Oz. Each $1.75

One in a Box; Weight 15 Oz. Each

Each

No. 22—Extra Bulbs, for the Delta Hand Lamp..... .....$0 25
No. 17—Extra Bulbs, for Delta 2-Cell Lamp..... .25

DELTA HAND LAMP ASSORTMENT

This Handsome Display Rack holds five of the fastest selling Delta Electric Lamps and Lanterns; It is constructed of Selected Golden Oak and has a hand rubbed finish; The descriptions of the various Lanterns and Lamps are Lithographed on Steel; The entire Rack is very modest in appearance and will add to the attractiveness of any store or show window.

Assortment Contains the Following	Each	Retail
3 Only, No. 1 —Two-Cell Lanterns	$2.00	$6.00
3 Only, No. 7 —One-Cell Lanterns	1.25	3.75
2 Only, No. 500—One-Cell Lanterns	1.50	3.00
1 Only, No. 8 —Bicycle Lamp	1.50	1.50
1 Only, No. 8 —Battery Attachment	.65	.65
2 Only, No. 2 —Hand Lamps	1.25	2.50
1 Only, Display Rack		Free
Total Retail Value		$17.40

Each

No. 1740—Delta Hand Lamp Assortment.....$17.40
Weight 25 Lbs. per Assortment

COLUMBIA BATTERIES

For Use in Hand Lanterns

A Three Volt Battery is often more efficient than the No. 6 Dry Cell; If this Three Volt Battery is used be absolutely certain that a Three Volt Bulb is also used as this Battery will ruin an ordinary Bulb; Used with a No. 6 Dry Cell.

No. 3V2—With Regular Connections; Knurled Nuts $1.00

One in a Box; Weight 32 Oz. Each

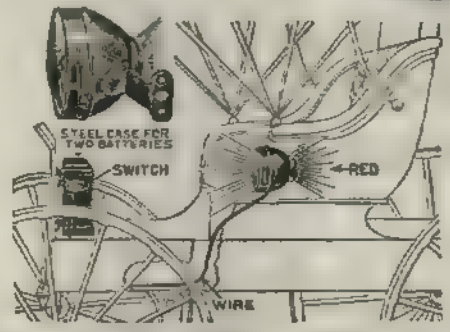
DELTA TWO-CELL LANTERN

For the same uses as the One-Cell Delta Lantern; Has Combination Spotlight and Diffusing Light Reflector; Objects can be spotted hundreds of feet away; Batteries last six months with ordinary nightly use. Indoors hang on wall and light whole room. Takes two 6 in. Batteries, either Round or Square Carton.

Each

No. 1—Delta Two-Cell Lantern; Gun Metal Finish; Complete with all connections ready for use, excepting Batteries $2.00

Weight, without Batteries, 1¾ Lbs. Each
Weight, Packed, 2 Lbs. Each



DELTA VEHICLE ELECTRIC LIGHTING SYSTEM

This is a complete system, with Headlight Battery Case, Switch, Wires, Bolts, Nuts, etc., ready to install. Battery is not included. See Page 3300 for prices.

The Invasion of Automobiles into the country roads is convincing drivers of horse-drawn vehicles as to the need of a suitable warning signal. Many states have passed laws requiring the carrying of lights after dark.

By installing one of the No. 32 systems the driver not only complies with the law, but also provides himself with a powerful Headlight with which he can travel narrow, crooked roads with safety. Can be attached either side of vehicle with strong bracket made of strip steel which will not break like a casting.

Headlight, 3 in. Diam., drawn from Heavy Gauge Steel, Finished in Black Enamel, baked on. Parabolic Reflector, Silver Polished, throws a powerful light ahead, showing objects over 200 ft. distance in clear relief. Owing to the scientific construction, that part of the Reflector behind the Bulb, ordinarily wasted is used to show a Red Warning Light 1½ in. Diam. to the Rear, 3 Volt Genuine Mazda Bulb.

Battery Case made of Heavy Sheet Steel, attaches to Dash or other convenient place by four Bolts. Handsomely Finished in High Grade Black Enamel, baked on. Holds two 6 in. Batteries.

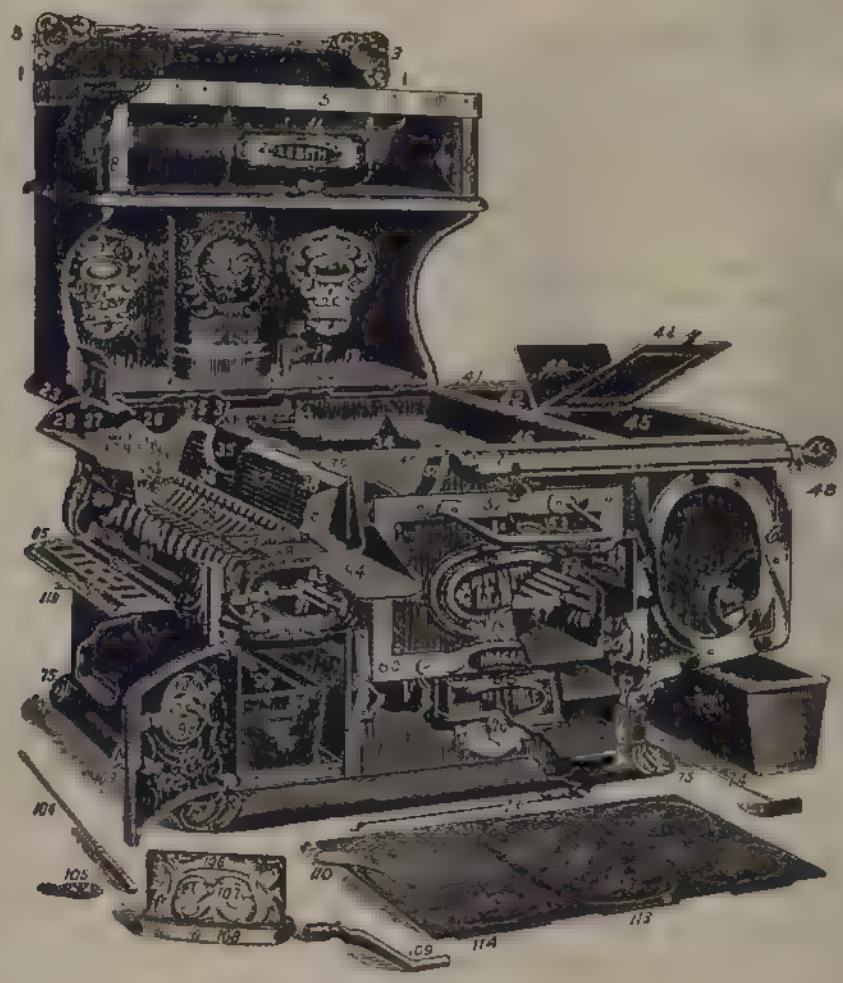
Switch located on Battery Case, no exposed wires. Ten ft. of double wire, heavily insulated, with each outfit.

Each

No. 32—Outfit Complete as described above, with Headlight, Wiring, Bolts, Battery Case, but no Battery.....$3.50

Weight 3½ Lbs. Each

REPAIRS FOR STEEL RANGES



STEEL RANGE PARTS

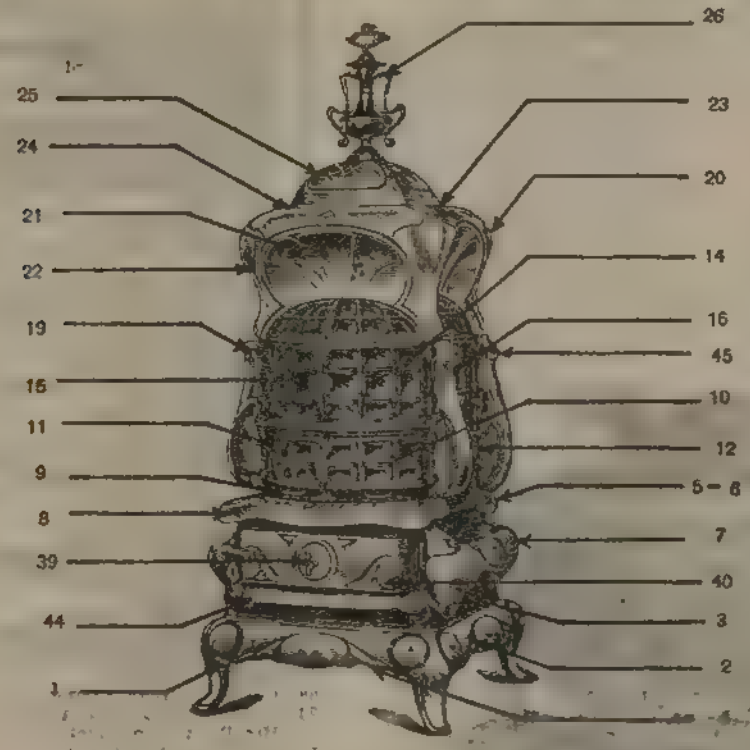
When Ordering give Figure No. and be sure to give the Name of Stove that part is wanted for

In making up the sectional cut showing parts of Steel Ranges it has been impossible to follow any particular range as it was necessary to show as nearly as possible the parts of any of our line of Ranges and they vary greatly in many details. We think, however, that if you will follow as closely as possible the numbers and names in ordering repairs you will be saved many annoying errors.

1 Short Section Nickel Band, High Closet Back Guard
2 Nickel Top Band, High Closet Back Guard
3 Nickel Corner Brackets, High Closet Back Guard
4 Pipe, First Joint
5 Upper Nickel Band, High Closet
6 Left Hinge, High Closet Door
7 Right Hinge, High Closet Door
8 Nickel Brackets, High Closet (Specify Right or Left)
9 Lower Nickel Band, High Closet
10 High Closet Door
11 High Closet Panel
12 High Closet Lift
13 Tea Shelves
14 Tea Shelf Brackets
15 Pipe Damper Frame
16 Pipe Damper
17 Direct Draft Damper Handle
18 Direct Draft Damper Plunger
19 Name Plate
20 Number Plate
21 Pouch Feed Damper
22 Pouch Feed Door
23 Left End Top
24 Collar Top
25 Back Flue
26 Extension Pocket
27 Water Front Cap
28 Cast Pouch Front
29 Front Lining (Brick Lining in Two Sections
30 Back End (Brick or Cast)
31 Direct Draft Damper Frame
32 Direct Draft Damper
33 Direct Draft Damper Clamp
34 Center Post
35 Front Oven Steel Guard
36 Left Section Fire Back (Brick or Cast)
37 Center Section Fire Back
38 Right Section Fire Back Brick or Cast)
39 Cast Oven Top Guard
40 Steel Oven Top Guard
41 Reservoir Top
42 Back End Reservoir Casing
43 Back Section Reservoir Covers
44 Front Section Reservoir Covers
45 Right Side Reservoir Casing
46 Front Top
47 Large Towel Bar
48 Towel Bar Brackets (Specify Right or Left)
49 Towel Bar Knobs
50 Cast Front Main Top Guard
51 Oven Door Catch
52 Oven Door Latch
53 Oven Door Latch Dog
54 Oven Door Handle Socket (Specify Right or Left)
55 Oven Door Handle
56 Oven Door Panel
57 "Never-Break" Steel Oven Rack
58 Reservoir Damper Frame
59 Reservoir Damper
60 Oven Door Frame
61 Oven Ventilator Panel
62 Nickel Front Reservoir Frame
63 Reservoir Damper Handle
64 Reservoir Panel
65 Cast Reservoir Check
66 Cast Reservoir Casing Bottom
67 Right Hand Oven Door Hinge
68 Clean Out Door
69 Clean Out Door Frame
70 Hot Blast Flue Indicator
71 Hot Blast Flue Panel
72 Left Oven Door Hinge
73 Reservoir Tank
74 Flue Scraper
75 Cast Corner of Base
76 Towel Rod
77 Duplex Grate Cogs
78 Long ½ Duplex Grate
79 Short ½ Duplex Grate
80 Back Duplex Grate Cap
81 Duplex Grate Frame
82 Left Duplex Grate Track
83 Toaster Door Guard
84 Toaster Door
85 Toaster Door Draft Slide
86 Lining Rest
87 Front End Lining
88 Lower Front End Lining
89 Main Cast Front
90 Front Grate Cap
91 Right Grate Track
92 Grate Frame
93 Drop Feed Door Panel
94 Drop Feed Door
95 Ash Pan
96 Ash Pan Lift (Complete)
97 Ash Pan "Draw Out" Handle
98 Screw Draft Disc
99 Screw Draft Yoke
100 Screw Draft Handle
101 Ash Pit Door
102 Ash Pit Door Catch
103 Ash Pit Handle
104 Poker
105 Inside Oven Ventilator Disc
106 Grate Door
107 Grate Door Turnbuckle
108 Nickel Ash Guard on Grate Door
109 Duplex Grate Shaker
110 Lifter
111 Short Center
112 Right Hand End Key Plate
113 Center Key Plate
114 Front Key Plate
115 Lids (Specify 7, 8 or 9 inch)
116 Reducing Cover (Specify 7, 8, or 9 inch)
117 Nickel Band
118 Cast Oven Rack Slides
119 Toaster Door Turnbuckle
120 Oven Door Hinge Spring

DO NOT FAIL TO GIVE THE FULL NAME AND NUMBER OF RANGE

STOVE REPAIRS



No. 1881A—BASE BURNER PARTS

When Ordering, Give Both Class and Figure Nos.

Nos.	Names
1—	Legs
2—	Base Strips
3—	Base Side
4—	Bottom
5—	Check Damper Handle
6—	Check Damper
7—	Foot Rails
8—	Nickel Name Plate
9—	Poker Door
10—	Lower Front Mica Door, Right
11—	Lower Front Mica Door, Left
12—	Lower Right Mica Door
13—	*Lower Left Mica Door
14—	Upper Front Mica Door, Right
15—	Upper Front Mica Door, Left
16—	Upper Right Mica Door
17—	*Upper Left Mica Door
18—	Right Nickel Wing
19—	Left Nickel Wing
20—	Right Section, Nickel Dome
21—	Front Section, Nickel Dome
22—	Left Section Nickel Dome
23	Back Section, Nickel Dome
24—	Magazine Cover
25—	Swing Top
26—	Urn
27—	*Magazine
28—	*Upper Main Back
29—	*Base Back
30—	*Back
31—	*Kettle Top
32—	*Kettle Cover
33—	*Rolling Damper with Handle
34—	*Rolling Damper Handle
35—	*Shaker
36—	*Elbow
37—	*Cogs for Grate
38—	*Fire Pot
39—	Screw Draft
40—	Ash Pit Door
41—	Shaking Ring
42—	Long Duplex Grate Bar
43—	Short Duplex Grate Bar
44—	Nickel Ash Guard
45—	Back Nickel Wing

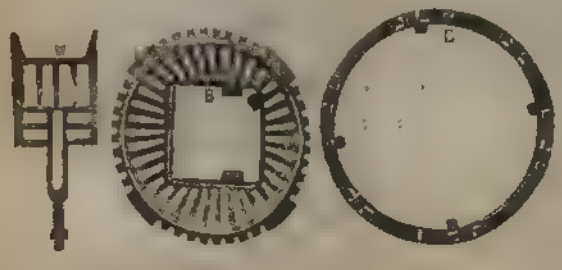
*Articles marked * not shown in cut

No. 41—Shake Ring

No. 42—Duplex Bars

No. 43—Duplex Bars

No. 294—Firepot, Shake Ring and Duplex Bars for Base Burners



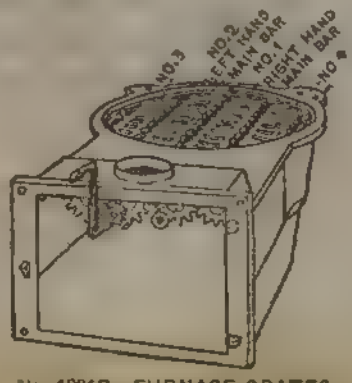
No. 1881B—OAK STOVE PARTS

When Ordering, Give Both Class and Figure Nos.

Nos.	Names
A—	Draw Center of Grate
B—	Grate Less Draw Center
C	Grate Rest

No. 1881C—FOR CANNON AND LAUNDRY STOVES

Coal Grate (used without Inside Firepot)



No. 1881D—FURNACE GRATES

THINGS A STOVE MAN SHOULD KNOW

The Sizes of Stoves. A No. 9 stove is not necessarily larger than a No. 8. These numbers apply to the lids only and mean, on the No. 8 that the diameter of the lids is 8 to 8¼ inches and the No. 9 has 9 to 9¼ inch covers. The size of the oven determines the size of the stove.

Difference between a Cook Stove and a Range. A cook stove is distinguished from a range by the smoke pipe, which, on a cook stove is on the other end from the fire box; while on a range it is on the side opposite the oven door. A cook stove has two oven doors, one on each side, while a range has but one. On Cook Stoves and Cast Iron Ranges, face the ash pit for front of stove; on steel ranges, only the oven door side is termed front of range.

Ranges have one Sheet Flue, which distributes the heat more evenly around the oven than the three flues of a cook stove.

A Duplex Grate is for both wood and coal. It consists of two bars which are governed by cog wheels at either end. One side is used when coal is the fuel and the reverse side when wood is burned. The side of Grate which has smallest air space is intended for wood. Operate the Duplex Grate, (if the stove or range is fitted with one) by **turning it over** when the fire needs cleaning, and then back again. **Never agitate** a Duplex Grate, or the oven will not bake on the bottom.

An Anti-Clinker Duplex Grate is no different from any other Duplex Grate, but has a Clinker Door, on left end of range or front of Cook stove, through which the poker may be inserted for removal of clinkers lying on top of the grate.

Extension Fire Box is a cast extension, to be used when wood is burned; placed on back end of Range, and by the removal of end lining admits the use of longer sticks.

Principle of Hot Blast. The Hot Blast device furnishes a supply of air consisting largely of oxygen, which, being admitted over top of fire, mixes with gases and smoke of combustion and ignites, thus utilizing more of the heat producing elements of coal, which would otherwise go up and out of chimney.

When Ordering Repairs it would help matters if the following points are kept in mind:

Give full name of stove.

Don't order parts for "Trade-Marked" stoves without giving distinguishing name. For instance, Peninsular, Garland, Jewel, Niagara, etc. are family names and must have a prefix, such as Crown Niagara, Splendid Peninsular, Art Garland, Grand Jewel, etc.

Don't say parts are wanted for a No. 9 stove when the stove is 9-18. Give full number and dates if any, as found on stove.

When ordering repairs for fire box, if stove has Pouch Feed, say so.

By Pouch Feed is meant the extension (on left end as you face oven door on a range, or on front end as you face ash pit on a cook stove) through which fuel is fed. On account of its lift door, it is sometimes called "Lift Feed."

When ordering bottoms, state whether Main Bottom of stove; or Frame on which stove rests, is wanted.

Specify whether long or short **base strips** are wanted.

When ordering **Hearth,** state whether main hearth or hearth slide is wanted.

On oven doors state whether right or left and be sure you face front of the stove when naming them.

Do not call for **Top** unless complete Top, including Rim, Covers and Centers is wanted.

In ordering parts of **Top Rim,** state whether front, right, left or collar top is wanted.

Stoves are shown to the best advantage on a solid Platform 10 inches high. Where space is desirable, the **Stove Trucks** on page 995, or **Stove Casters,** as shown on page 247, should be used.

No color is as desirable for the top of a stove platform as a bright red.

A little Red Buggy Paint on the stove pipe collar of cook stoves and around the cylinder and bowl of the Heaters will add a bit of attractiveness to catch the passer by.

DIRECTIONS FOR OPERATING STOVES, RANGES, FURNACES, ETC.

A Stove or Furnace has no more draft than a square box. No stove has what is called a draft; the **Chimney Creates the Draft,** and it should be higher than any other part of the building. The taller, the better the draft. Do not think, because a lighted paper is drawn up the chimney, it proves the draft to be good. It **proves nothing of the kind;** lighted paper will rise of itself in the open air. **No good test can be made except to connect a stove and try it.**

TO SECURE GOOD RESULTS IN STOVES, RANGES, FURNACES, ETC., SEE:

1st. That the chimney is clear, and has a good draft at pipe hole.

2nd. That two smoke pipes do not enter the same chimney flue.

3rd. That every other fire opening in the same chimney is closed.

4th. That the pipe fits closely on the stove and in the chimney. No air should go outside of the pipe.

5th. That the pipe does not go too far into the chimney.

6th. That no ashes from the chimney get into the end of the pipe.

7th. That there are no pipe holes open on the opposite side of the chimney, either above or below, and that there is no unused stove with draft slide open leading into the same chimney.

8th. That the pipe entering chimney is as large as the collar of the stove.

9th. That all flues are open and clear, so that smoke can freely pass through them. In cleaning flues, clean **All** the flues, and do not push soot and ashes into back corners, and in that way stop them up. The flues of stove or range must be cleaned frequently, and a hot air furnace every season.

10th. Examine all dampers in the flues and see that they open properly and close tightly and do not get out of place.

11th. Be sure that you know how to operate the dampers, so that they may not be open when you think they are closed.

Everything in good order, as heretofore described, there cannot possibly be any failure in operation.

Remember we guarantee the Apparatus and not the Flue.

CHIMNEYS AND STOVES; HOW TO OPERATE RANGES

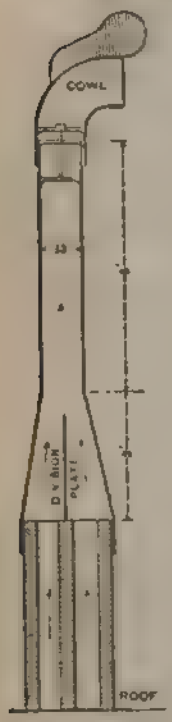


Fig. 1. To Improve a Weak Chimney

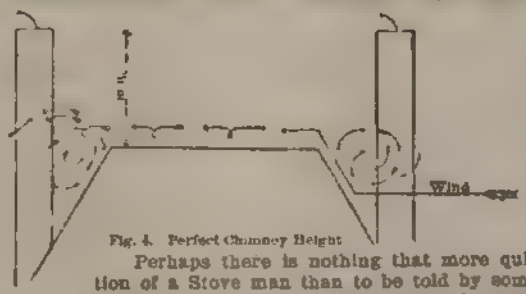


Fig. 4. Perfect Chimney Height

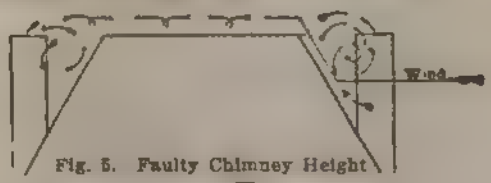


Fig. 5. Faulty Chimney Height

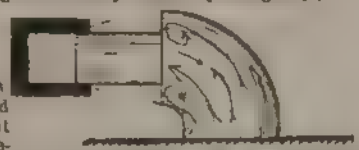


Fig. 6 Faulty Chimney Construction

Perhaps there is nothing that more quickly arouses the indignation of a Stove man than to be told by some one who has purchased a Stove or Range from him that "it does not draw," that "it will not bake on the bottom," that "it gets red hot on top and the oven remains cold," that the draft is good for the coal burns up promptly,' etc.

Many reputable dealers jump at the conclusion that the fault is in the stove itself, and that for some mysterious reason that particular stove or range is not proportioned together, although he may have sold previously **a hundred ranges of exactly the same kind, all of which are giving perfect satisfaction.**

Other dealers, while not believing the range to be at fault, cannot understand why it does not work and **fail to discover the cause and apply the remedy.**

We feel absolutely safe in saying there is no such thing as a stove or range that will not work if the chimney to which it is connected is a good one and the stove pipe leading to it is properly adjusted. Such defective stoves or ranges are not sold in these days. No manufacturer can afford to put out a stove or range, guaranteed as they are, that is so defective in its construction that it will not work under ordinary conditions. While it may be true and undoubtedly is, that some ranges require a better draft than others this extra draft or even an excessive draft is easily created when the essential requirements of the chimney are understood and the remedies applied intelligently. Unless something has happened to the range in transit nothing will stop its operation, if it has half a chance. **The cheapest range we sell will work as satisfactorily as the highest priced range, if connected to a proper chimney.**

Inasmuch as the jobbers and manufacturers of ranges cannot furnish the draft to go with each stove, and inasmuch as the owner must furnish a chimney, we must endeavor to make it absolutely plain that no stove or range has any draft in itself and the chimney must furnish the draft. There are no two chimneys exactly the same, but there is very little material difference in the construction of cooking stoves or ranges so far as the flues are concerned. When a stove or range does not operate satisfactorily it is because the chimney does not provide the right kind of draft, or the stove is not properly placed to the chimney.

If the following instructions are followed, you must obtain good results:

1st. See that chimney is free from all obstructions inside. Has a perfect smooth flue, and extends about **three feet above the highest point of the house and its surroundings.**

2nd. A good smoke flue should be at least 8x8 inches. Must not be connected with more than two stoves or ranges. Any chimney having more than one of these connections, each pipe must be provided with a **damper to shut off the Cold Air when such stove or range is not in use.**

3rd. If a chimney requires additional length, continue it with brick of the same size, as shown in cut (Fig 3). If sheet iron extension be sure it has the same area of all the flues in the chimney, and put in flue partitions, as shown in cut (Fig 1). Where chimney cannot be extended above surrounding buildings or other obstructions, **use a revolving cowl, as in Fig. 1, or a branch stationary cowl, as in Fig. 2.**

Fig. 2. Branch Chimney Cowl

4th. Smoke and hot air will rise in a spiral column, therefore, a round, straight, smooth flued chimney **produces the draft, and is the easiest to keep clean as shown in Fig. 3 and 4.**

5th. Smoke flue of any chimney should not be used for ventilating. All openings must be closed tight, **except the one where smoke pipe enters.**

6th. Faulty chimney heights and poor connections of stove pipe as shown in Fig. 5 and 7 cause a black tarry moisture called Creosote. After this enters chimney, once it is only a short time when all pipes and flues will be eaten up by its acids. This Creosote may also be caused by using moist fuel of any kind, and **there is practically no remedy except to rebuild the chimney.**

7th. For operating a stove or range, form a quick fire, open direct damper on top. For baking, after fire has well started close direct and reservoir damper. This will bring entire heat around oven and secure desired results. When reservoir stove or range is not used for baking the reservoir damper may be left open **at all times to heat water properly.**

8th. Be sure that fire is not too hot after closing dampers, otherwise oven will burn on top and not bake on bottom. Occasionally a new stove or range will not bake on bottom, because they are new and too clean. A few days' use will put an ash deposit on main bottom under the oven, retain heat to bottom of oven plate, **after which it will bake properly.**

9th. To test a chimney for good or poor draft, take off the left or right hand front cover over fire-box, when facing stove, and open direct draft damper on top. Put in a piece of loose paper and light it with a match. After it is well started if the smoke and flame draws down you have a good draft. If, however, it rises, or a portion thereof, the draft of chimney is poor. Cover must be open at all times to obtain desired results for this test.

Fig. 3 Remedy for Low Chimney

10th. In any stove or range where soft coal or lignite is used the flues in bottom of such stove or range, including pipes to chimney, must be cleaned at least every three weeks. Chimney flues should be cleaned once a year, no matter what kind of fuel is used.

11th. A steel range or cook stove is hard to operate with hard coal, and should use nothing but pea or possibly nut coal.

12th. To burn hard coal it is well to have on hand at all times a small amount of wood to start a quick fire in case it has burned down to a low point.

13th. To hold fire over night with hard coal close all fire-box registers. If draft is still too strong put a shovel or two of ashes on top of fire. This will furnish the desired result.

14th. It is absolutely necessary, where a dealer does not set up the stove or range himself, to examine them thoroughly to see that all pipes and elbows to be connected thereto fit perfectly, and give his customer a set of these rules and directions, which will be furnished on application.

15th. By following the above mentioned suggestions and instructions our manufacturers guarantee every stove or range made.

Fig. 7. Improvement Bad Conditions

WALL TELEPHONES

COMPACT TYPE

Guaranteed Without Time Limit

We carry the most durable and efficient telephone on the market, made by the largest manufacturers of Bridging Telephones in the world.

Every telephone is guaranteed against defects in material and workmanship, not for a stated period of time, but for a life time.

By use of the telephone the farmer is constantly in touch with the market, is enabled to communicate with neighbors and friends and finds it indispensable, especially in cases of sickness or accident; the manufacturer can be in constant touch with various branches; logging headquarters can daily converse with camps or crews; every line of industry in fact has found that the telephone saves time, steps and money.

All of our instruments are perfect bridging models designed by engineers who have specialized along this line for years. Their methods of construction tend to prolong the life of the various parts and of the instrument as a whole.

Standard equipment of each instrument consists of Three-ply Laminated Generator; Long Pattern Bridging Bell Ringer, enameled and Nickel Plated; Long Lever Automatic Switch; Platinum Contacts; Genuine Solid Back Long Distance Transmitter with Adjustable Arm and Concealed Cords; Long Distance Induction Coil; Bi-polar Receiver and Cord; Two cells of Dry or Wet Batteries (according to style of cabinet); Bi-Polar Lightning Arrester which GUARANTEES TELEPHONE AGAINST LIGHTNING and Cabinet of quarter sawed Oak with high piano finish.

With each telephone we furnish detailed instructions for installing apparatus and constructing rural lines. We will supply advice, suggestions, plans or specifications gladly and without charge.

DOUBLE BATTERY BOX TYPE

Two different methods of line construction are used In rural communities where there is no interference from electric light or trolley wires the Grounded Circuit is used One wire only is strung on poles to which one side of the telephone is connected and the circuit is completed by connecting the other side or binding post of the telephone to a wire soldered to a ground rod driven six feet into the earth The Metallic Circuit of two wires is constructed by running a second wire parallel with the first and connecting same with the side of the telephone not already attached to the line wire. **For private lines No. 14 galvanized wire is used, bridging lines require No. 12, and on longer than 25 miles in length use No. 10 galvanized wire.**

Do not allow bare wires to touch one another, nor anything else except insulators. Use Porcelain Knobs or Insulated Cleats inside, and Pony Glass Insulators outside Home grown poles can be used but should be at least 15 ft. high and 4 in. at top, thirty or forty poles to the mile, with regular Brackets for Insulators. If several grounded or Metallic circuits are carried on one set of poles, use Cross Arms and Pins instead of Brackets. We can furnish you anything you need from Post Hole Diggers and Climbing Irons to Battery Renewals.

BRIDGING OR PARTY LINES, TOLL, RURAL, ETC.

It is possible to use 40 of our 'phones on a line, but not satisfactory. 15 should be the limit on a section, and if more are wanted, divide them and have a plug board in one house to connect the divisions, when necessary All Ringer Movements on a line should be wound to the same resistance; we furnish 1,600 Ohms as regular, but any other can be supplied.

COMPACT TYPE

No. 480A—4 Bar, 12 Magnet Bridging Generator; Bridging Ringer, Wound to 1600 Ohms.....$14.00

No. 480B—5 Bar, 15 Magnet Bridging Generator; Bridging Ringer, Wound to 1600 Ohms..... 18.75

No. 480C—6 Bar, 18 Magnet Bridging Generator; Bridging Ringer, Wound to 1600 Ohms..... 21.00

The 6 Bar is Only Preferable to the 5 Bar at Junction Points of Many Phones, or where the very Best and Strongest Instrument is Desired.

Size Case 32x12 in. Over-all; Net Weight 35 Lbs.

Shipping Weight, One in Crate, 62 Lbs.; Two, 100 Lbs.

DOUBLE BATTERY BOX TYPE

No. 480D—4 Bar, 12 Magnet Bridging Generator; Bridging Ringer, Wound to 1600 Ohms.....$16.00

No. 480E—5 Bar, 15 Magnet Bridging Generator; Bridging Ringer, Wound to 1600 Ohms..... 19.50

No. 480G—6 Bar, 18 Magnet Bridging Generator; Bridging Ringer, Wound to 1600 Ohms..... 21.75

The 6 Bar is Only Preferable to the 5 Bar at Junction Points of Many 'Phones; or where the very Best and Strongest Instrument is Desired.

Size Case 26x9 in. Over-all; Net Weight 30 Lbs.

Shipping Weight, One in Crate, 53 Lbs.; Two, 91 Lbs.

SERIES OR PRIVATE LINES

Series 'Phones are used on separate lines to Exchange Switchboard, or on private line of two instruments. No Series Telephone is satisfactory for party line service

COMPACT TYPE

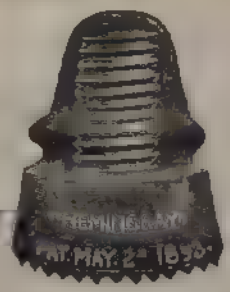
Each

No. 480H—4 Bar, 50,000 Ohm, Series Generator; Series Ringer, Wound to 80 Ohms.....$15.00

DOUBLE BATTERY BOX TYPE

No. 480K—4 Bar, 50,000 Ohm, Series Generator; Series Ringer, Wound to 80 Ohms.....$15.00

GLASS INSULATORS



	Each
No. 479A—(No. 9) Pony, 2¼ in. Diam. Base, 2 in. Diam. at Groove, 3⅜ in. High	$0.04
Weight 11 Oz. Ea.; 765 Lbs. per 1000 400 in a Barrel	
No. 479B—Double Petticoat Pony, Deep Groove, 2⅞ in. Diam. Bottom, 3½ in. High	$0.06
Weight 13½ Oz. Ea.; 926 Lbs. per 1000 300 in a Barrel	
No. 479C—Double Petticoat, Deep Groove; 3 in. Diam. Bottom; 4 in. High	.10
Weight 20 Oz. Each; 1400 Lbs. per 1,000 200 in a Barrel	

CROSS ARMS

TELEPHONE

F. O. B. Minnesota Transfer

Unfinished Washington Fir; Size 2⅝x3¾ in.; Bored for 1¼ in. Insulator Pins and one ⅝ in. Bolt in Center.

Nos.	479M	479K	479L
No. Pins	2	4	6
Length, Ft.	2½	3½	5½
Wt. Each, Lbs.	6¼	8¾	13
*Each	$0.32	.46	.78

Nos.	479M	479N	479P
No. Pins	8	10	12
Length, Ft.	6⅝	8½	10
Wt. Each, Lbs.	17	21	25
*Each	$1.02	1.36	1.64

STANDARD ELECTRIC LIGHT

Unfinished Washington Fir; Size 3¼x4¼ in.; Bored for 1¼ in. Insulator Pins and one ⅝ in. Bolt in Center.

Nos.	479R	479S	479T	479V
No. Pins	2	3	4	6
Length, Ft.	3	5	6	6
Wt. Each, Lbs.	10	17	20	20
*Each	$0.50	1.00	1.20	1.20

Nos.	479W	479X	479Z
No. Pins	8	10	12
Length, Ft.	8	10	10
Wt. Each, Lbs.	27	34	34
*Each	$1.62	2.12	2.12

INSULATOR PINS

OAK, Painted Red
Used in the Cross Arms

	Per 100
No. 479D—1¼x8 in.; Weight 25 Lbs. per 100	$2.00
No. 479E—1½x9 in.; Weight 35 Lbs. per 100	2.20
250 in a Sack	

INSULATOR BRACKETS

	Per 100
No. 479G—12 in. Long, Oak; Painted Red; Attached Direct to Pole or Side of Building, when one Wire is on Same	$4.00
100 in a Crate; Weight 65 Lbs.	

WALL AND POLE BRACKETS

Malleable Iron, Japanned

	Per 100
No. 479AA—Without Insertion	$10.00
Weight 150 Lbs. per 100	

High Insulation Wall

	Per 100
No. 479BB—Without Insertion	$8.00
Weight 85 Lbs. per 100	

TELEPHONE POLE STEPS

	Per 100
No. 479CC—⅝x9 in. Wrought Steel, Cone Point	$5.40
Weight 65 Lbs. per 100	

PLAIN CROSS ARM BRACES

Size 1x⅝ in.	Weight per 1000 Pieces	Per 1000
20 in. Long	1000 Lbs.	$40.70
22 in. Long	1100 Lbs.	44.80
1⅜x⅝ in.		
24 in. Long	1500 Lbs.	61.00
26 in. Long	1625 Lbs.	66.10

Can furnish Galvanized Cross Arm Braces on Special Order Only

We also carry Shovels, Spoons, Post Hole Diggers, Augers, Crow and Tamping Bars, Pike Poles, Cant Hooks, Lug Hooks, Wire Stretchers, Grip Tackle Blocks, Hand Vises, Come Along Clamps, Climbing Irons, Splicing Clamps, Copper and Galvanized Wire, Guy Wire and all Fittings; Wrenches, Hatchets, Drills, Screw Drivers, Linemen's Belts, Blow Torches, Coppers, Solder, etc.

METAL WALL TELEPHONES

For Private Line Work

For Batteries See Page 490.

This is a splendid little all Metal Telephone of the Battery Type; designed to operate with two parties, on a line from 5 to 1000 feet long. It has a black rubber finish, with removable clip cover. All connections are inside. Two dry batteries are required for each instrument. It is not intended for connection to long distance lines, but for factory, store or apartment house service, or between two houses not less than 5 or more than 1000 feet apart.

	Each
No. 126—Size 8⅝x5¾ in., 3¾ in. Projection	$5.00

Weight 2 Lbs. Each

CROWN

A small, compact Apparatus for Short Line Work and Interior Service as for connections between Neighboring Houses, Kitchen and Servant's Room, House and Stable, Office and Warehouse, etc.; Made of Pressed Steel, Black Japan Finish; Will not shrink nor swell out of shape under any conditions; Guaranteed mechanically and electrically; Each Telephone requires two Dry Batteries.

	Each
No. 2—Size 5½x4½ in., 1¾ in. Projection	$3.00

Two in a Box; Weight 1¾ Lbs. Each

DESK TELEPHONE SETS

Nickel Plated Brass Stand; 6 Bar, 15 Magnet Generator in Box; Extension Bell in another Box; Long Distance Induction Coil in Base of Stand; L. D. Solid Back Transmitter; Bi-polar Receiver with 3 ft. Silk Cord; Long Lever Automatic Hook, Platinum Contacts; Two-Coil Dry Battery.

	Each
No. 481B—Bridging or Party Line Set, 1600 Ohms	$21.75
No. 481C—Series or Private Line Set	18.00

Actual Weight 24 Lbs.; Shipping Weight 47 Lbs. per Set

The same general details of use, construction, etc., as given for the Wall Phones apply to the Desk Sets

APARTMENT HOUSE TELEPHONE SYSTEMS

This Set consists of one Special No. 54 Vestibule Telephone of the latest Flush Metal Type, with Square Corners, Size 8½x6¼ in.; for 10 Buttons or less and 6 No. 1678 Letter Boxes with Square Corners, Size 9x4⅞ in., with a Letter Slot of 4½ in.; all mounted on a Golden Oak Mat. When furnishing Mounting Mats the Telephone will be mounted in the center and all orders will be executed in this manner unless we are instructed otherwise.

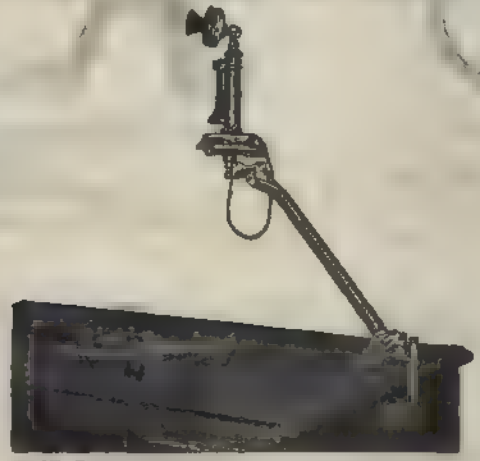
Brushed Brass Finish

	Per Set
No. 481A—Set complete as described above, consisting of Telephone with 6 Buttons and 6 Letter Boxes, all mounted on Golden Oak Mat; Telephone wired for Multiple Intercommunicating System	$40.00

	Each
No. 1678—Extra Letter Boxes with Calling Buttons	$4.50

Note—We can furnish on Special Order Apartment House Telephone Systems made up to suit any special requirements. Give us dimensions of space allowed, also send us wiring diagram. Other finishes than Brushed Brass for the Telephone and Letter Boxes and Golden Oak for the Mat can be furnished at a slight advance in cost.

TELEPHONE ARMS OR HOLDERS



EQUIPOISE, ADJUSTABLE

Perfectly self-balancing in any position; Always Accessible, but never in the way; Telephone cannot fall; Operated by touch of the finger; avoids disturbing papers or upsetting ink wells; Can be attached anywhere.

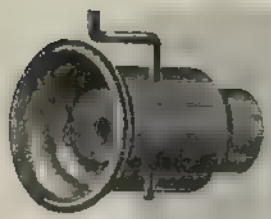
	Each
No. 1—24 in. Arm, Hard Rubber Finish	$6.00

Weight 3½ Lbs. Each

SPEAKING TUBE SUNDRIES

For Use in Stores, Factories, Offices, Residences, Hospitals, Hotels, etc., etc.

A cheap and easy means of communication, saving much time and many steps

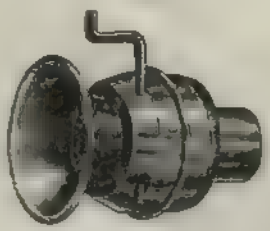


WHISTLES

Per Dozen

No. 482A—Round, Nickel Plated Brass, Standard Size, for 1 in. Tube.....$3.75

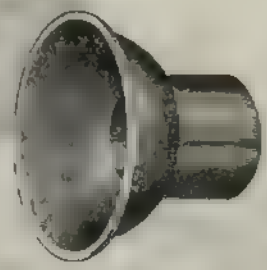
One Dozen in a Box



Per Dozen

No 482B- Beveled Pattern, Nickel Plated Brass; Standard Size, for 1 in Pipe $4 00

One Dozen in a Box



MOUTHPIECES

Per Dozen

No 482C—Nickel Plated Brass, for 1 in. Tube or Pipe; Used with Electric Bell Signals $2.00

Three Dozen in a Box

FLEXIBLE TERMINALS

Each

No. 482D—24 in. Wire Inserted Rubber Tubing with Whistle and Connector, for 1 in. Tin Pipe, Use at Desk, Bedside, etc. $2.00

TUBING ONLY

Per Foot

No. 482E—1 in. Diam., Flexible, Mohair Covered Rubber Tube, Spirally Wound with Wire; Will Cut to Any Length $0 60

S. T. COLLARS

Per Dozen

No. 482F—Nickel Plated Brass Connectors; for 1 in. Tube or Pipe and the Flexible Speaking Tube.....$2.00

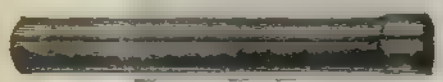
Five Dozen in a Box

FLANGED S. T. COLLARS

Per Dozen

No. 482G—Nickel Plated Brass, for 1 in. Tube or Pipe; a Wall Hanger for the Flexible Speaking Tube.....$3.60

One and a Half Dozen in a Box



TIN SPEAKING TUBE

Per 100 Feet

No. 482H—1 in. Diameter, Machine Made, Lock Seam, in 5 Foot Lengths $4.00

Weight, 14 Lbs. per 100 Feet

1000 Feet in a Crate

For Lines over 100 ft. we recommend Larger Tube; 1¼ in. for 100 to 200 ft.; 1½ in for 200 to 400 ft.; can furnish these sizes on special orders.

SPEAKING TUBE STAPLES

Per Pound

No. 482K—Coppered Steel Staples, for Fastening 1 in Tube or Pipe; About 33 per Pound.....$0 32

SPEAKING TUBE STRAPS

Per Pound

No. 482L Tinned Steel Strap, for Fastening 1 in Tube or Pipe; About 40 per Pound $0.50

SPEAKING TUBE ELBOWS

Square Turn, for 1 in. Pipe

Per Dozen

No. 482M—Pieced Tin, Square Angle, Satisfactory on Short Lines; Reinforced with a Locking Tongue....$0.60

Per Dozen

No. 482N—Stamped Tin, Round Angle, Carry Sound Better and Withstand any Shifting from Settling of the Building More Safely than the Preceding Elbow $0.75

SPEAKING TUBE TEES

Per Dozen

No. 482P—Pieced Tin, for 1 in. Tin Pipe or Tubing.....$1.20

Nos. 482K to P, Open Stock

Give the Tubes and Elbows 1 in. Laps; make joints tight with white lead; keep elbows free from dirt

AUTOMOBILE ACCESSORIES

POWER STEEL AUTOWLOCK

Puts the Car Thief Out of Business

Auto and Spare Tire thieves are bold. Chains won't do, they can be clipped with small Nippers in a minute; But thieves can't clip Power Steel Autowlock with any Nippers they can conceal

Each

No. 3PA Made of 4 Feet of Famous Yellow Strand Power Steel Wire Rope, covered with a Strong Waterproof Fabric, with an Eye Spliced in each End and equipped with a Non-Pickable Brass Lock for securing it around the Wheel and Spring or Spare Tire and Rims.. . $2 00

Open Stock; Weight 2 Lbs Each

MOTOR ROPES

Highest Quality Manila Bolt Rope, Strong and Elastic; Fastener at each End, quickly adjusted to any length; No knots to tie, cannot slip and can be released instantly

Each

No. 1—Length 25 Feet, Diam. ⅛ in.; Tested Breaking Strength 2900 Lbs; for Cars Weighing up to 2000 Lbs. $1.50

Weight About 2 Lbs. Each

No. 2—Length 30 Feet, Diam. ¾ in.; Tested Breaking Strength 5000 Lbs.; for Cars Weighing over 2000 Lbs 3.00

Open Stock Weight About 5 Lbs. Each

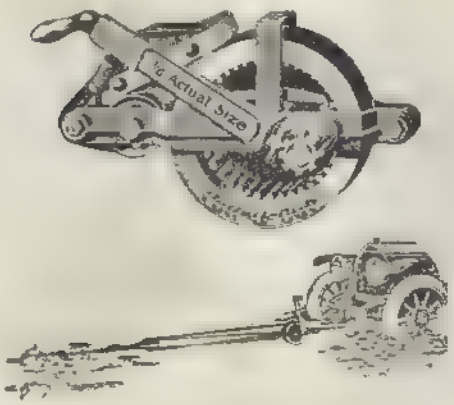
BASLINE AUTOWLINE

A small Steel Rope, with two ⅛ in. Manila Rope Slings which are fastened to each End, making it possible to attach the stalled Car to another Car or anything else in less than one minute; the Manila Slings prevent marring or scratching the Paint; Coils up flat and lays under the Cushion.

Each

No. 3—¼ in. Steel Rope, about 25 Feet Long; Will pull a 4000 Lb. Touring Car up a 20 per cent grade.....$5.00

Open Stock, Weight 4½ Lbs Each



PULL-U-OUT

A Very Serviceable Device for Pulling Stalled Machines to Firm Ground

If the auto skids, turns over or sticks in the mud, it isn't necessary to go for help; Simply drive into the ground the three little stakes that come with the outfit, hitch Pull-U-Out to them and to the Machine, give the crank a few turns, and out comes the Auto; a Boy can easily lift or move the heaviest Touring Car; In case of engine troubles, Pull-U-Out Chains make the finest possible tow line.

It combines light weight, great power and low cost; It will work in any position, and pull horizontally as well as lift, and has a greater reach and more power than a Chain Block; Can be used for Spotting Cars, Stretching Wire Fences, Pulling Stumps, for Painters' Rigging and hundreds of other similar jobs.

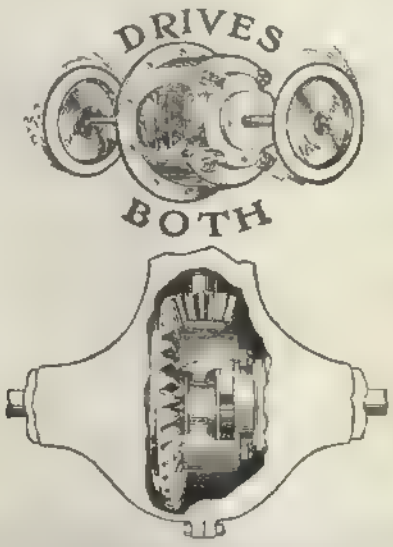
Each

No. 1—Equipped with 40 ft. of Steel Cable, Two 7 ft. Chains Three Stakes; Capacity, Lift 1 Ton, Pull (on Wheels) 100,000 Lbs.; Reach, 10 ft. Lift, 17½ ft. Pull; Weight 28 Lbs. Each $15.00

No. 2—Equipped with 50 ft. Steel Cable, Two Extra Heavy 7 ft. Chains, Three Extra Heavy Stakes; Capacity, Lift 2 Tons, Pull (on Wheels) 150,000 Lbs.; Reach, 12½ ft. Lift, 19 ft. Pull; Weight 50 Lbs. Each..... 28.50

No. 2X—Equipped with 100 ft. Cable, giving 25 ft. Lift, Otherwise same as above; Weight 60 Lbs. Each..... 28.50

No. 3—Equipped with 400 ft. Steel Cable; No Chains or Stakes; Capacity, Lift 3 Ton, Pull (on Wheels) 200,000 Lbs.; Lifts or Pulls 100 ft.; Weight 75 Lbs. Each . . . 60.00



BAILEY GEARLESS DIFFERENTIAL

Gives a positive drive on both Rear Wheels; the Mechanism locks the Rear Axle in one solid whole and both Wheels must revolve at the same rate, regardless of road conditions; This eliminates the one serious trouble of the Gear Differential; When a car equipped with a Gear Differential strikes a soft spot one wheel will spin around idly, wearing out the tire, but with the Gearless Differential, should one wheel sink in a wet spot, the power is applied to the solidly grounded wheel and the Car is driven forward; Prevents skidding, side sway, slipping, stalling on bad roads, etc.; Makes the Car ride easier, saves fuel, oil and tires, and does away with Rear Axle troubles; Allows the Car to travel at higher speeds without danger of jumping the road.

Each

No. 21—For "Ford" or "Chevrolet 490" Cars; (Same Differential fits both); Ready to Install.....$20.00

Weight 4 Lbs. per Set

AUTOMOBILE ACCESSORIES

Every Garage and every Car should have a Fire Extinguisher; Its use entitles Car Owners to 15 per cent reduction on Automobile Insurance.

Will not corrode Metals nor Injure Varnished Surfaces. Will extinguish burning Gasoline, Turpentine, Varnish, Oil Soaked Waste, Shavings, Excelsior or other highly inflammable materials

CREEPERS

For Use in Garages

Each

No. 1—Size 34x14½ in.; Frame is made of Wood; Net Work is 1½ in. Flat Wood Strip, Lapped to Frame; Ball Bearing, Steel Castor Wheels, Riveted in Place, Enameled Duck Head Rest, filled with Sea Weed; Height from Floor 2½ in.....$3 50

Open Stock; Weight 6 Lbs.

PYRENE FIRE EXTINGUISHERS

A Combination of Powerful Gases in Liquid Form, absolutely devoid of Moisture; When this Liquid is subjected to a temperature of 200 degrees or more it is instantly converted into heavy white gas, which surrounding the fire, excludes the oxygen and extinguishes the fire without damaging surrounding property; Pyrene will not freeze at a temperature of 100 degrees below zero and will not deteriorate with age; Length 13 in., Diam. 3 in.; Capacity One Quart

Complete with Black Enameled Bracket

Each

No. 1P—Polished Brass $8.00
No. 2P—Nickel Plated 9.00

One in a Carton, including Bracket
Weight 7½ Lbs. Each

FIRE EXTINGUISHER BRACKETS

Each

No. 1W—Black Wall Brackets.....$0 25
No. 1V —Black Vehicle Brackets..... .50

Open Stock; Weight ⅝ Lb. Each

PYRENE LIQUID

For Refilling Fire Extinguishers

Per Quart

No. 5—Quarts; Weight 3½ Lbs. per Quart $1.50

Per Gallon

No. 10—Gallons; Weight 14 Lbs. per Gallon $6.00

The Extinguisher is filled same as a Kerosene Lamp

J. M. FIRE EXTINGUISHERS

Can be discharged either by pumping or by storing sufficient pressure, with Nozzle closed to force out the contents when Nozzle is opened; This leaves both hands free to aim and operate in cramped places; Length 13 in. Diam. 3 in.; Capacity One Quart

Each

No. JM—Polished Brass; Black Bracket $8.00

One in a Box, including Bracket
Weight 7 Lbs. Each

J. M. LIQUID — Per Quart

No. JM1—One Quart Cans; Weight 3½ Lbs. per Quart..... $1.50

Per Gallon

No. JM2—One Gallon Cans; Weight 14 Lbs. per Gallon.....$5 00

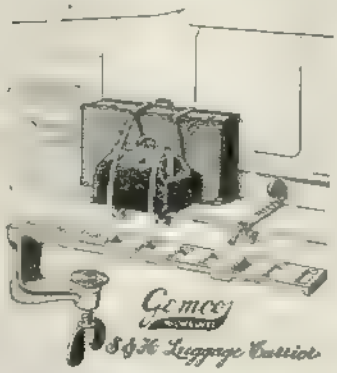
FOLDING LUGGAGE CARRIERS

For Trunks, Suit Cases and Packages; Easily attached to any Automobile; Made from 1x⅛ in. Steel, Black Japan Finish; Complete ready to attach.

Each

No. 1—For 28 in. Trunks $3 00
No. 2—For 30 in. Trunks..... 3 50

Weight 15 Lbs. Each



LUGGAGE CARRIERS

Fastens to the Running Board with thumb screw; Suit Cases, Traveling Bags, Golf Bags or Parcels of any size can be quickly strapped in place or removed; They do not touch the side of the Car, therefore do not scratch or mar the finish; Can be stowed in the Car when not in use.

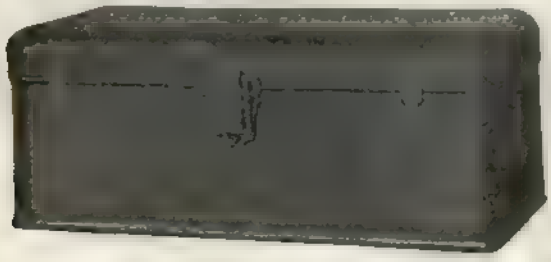
Per Set of 2

No. 55—Cast Iron, Black Japanned; Complete with Straps.....$2 50

Open Stock; Weight 4 Lbs. per Set

TOOL AND BATTERY BOXES

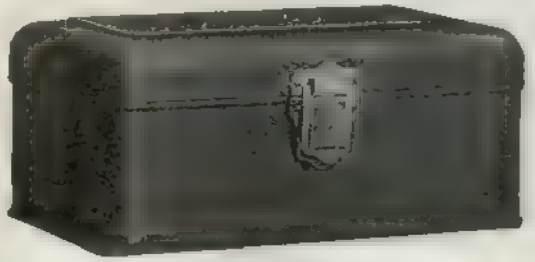
Made of Best Open Hearth, Full Cold Rolled Steel, Gun Metal Finish; Cover is Friction Fitted and bearing completely along the top of Box will never warp out of position; The Bottom is made of Anti-Rust Sheets, which are not affected by Wet Running Boards; In addition to this the Box is raised ⅝ in. off the Running Board, permitting a free circulation of Air; Equipped with Improved Type Lock and Hinges which permit the Cover to rise but 90 degrees eliminating any danger of Cover bumping back against the Body Frame and scratching the Finish



Each

No. 229—Size 22x 9x 9 in.; Weight 13¼ Lbs. Each..... ...$5.65
No. 240—Size 24x10x10 in.; Weight 16 Lbs. Each..... 6.35

One in a Carton



Each

No. 128—Size 12x8x10¾ in.; Weight 8½ Lbs. Each.....$4.25
No. 148—Size 14x8x10¾ in.; Weight 10 Lbs. Each..... 4.50
No. 168—Size 16x8x 9½ in.; Weight 10¼ Lbs. Each..... 4.50
No. 188—Size 18x8x 9½ in.; Weight 10½ Lbs. Each..... 4.66

One in a Carton

SPECIAL BOXES FOR FORD CARS

Each

No. 297F—Size 22x9x6¾ in.....$5.16

One in a Carton; Weight 11 Lbs. Each

Each

No. 188F—Size 18x8x6¾ in.....$3 75

One in a Carton; Weight 10 Lbs. Each

AUTOMOBILE CARRIAGE, AND SLEIGH HEATERS

Used by Automobilists, Liverymen, Rural Mail Carriers, Farmers and All Who Drive

Each

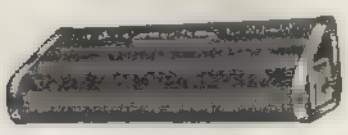
No. 3D—Clark's 14x7¼x3⅝ in.; Covered with Rich Dark Green Brussels Carpet with Braid Bound Edges; Frame Strongly Reinforced; Stamped White Metal Ends; Asbestos Lined..... $4 50

Weight 5¼ Lbs. Each

Each

No. 5B—Clark's, a Popular Low Priced Heater, Size 12x7x3½ in.; Covered with Brussels Carpet; White Metal Ends..... 3.20

Weight 4½ Lbs. Each

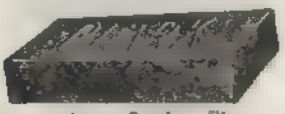


Each

No. 7D—Clark's 14x7½x4⅜ in., Slanting Flat top; Covered with Brussels Carpet; Cold Rolled Steel Ends, Nickel Plated; Adjustable Side and End Ventilators..... $4.80

One in a Box; Weight 7 Lbs. Each

CLARK COAL BRICKS



Burns without Smoke, Flame, Soot or Odor; a Full Cake will burn from 12 to 15 Hours; One-third of a Cake is enough for an ordinary drive. Size 7½x2½x1¼ in.

IN PACKAGES Per Dozen

No. 1—First Grade..... $1 60
No. 2—Second Grade..... 1 30

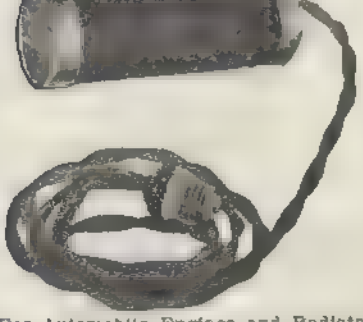
One Dozen Cakes in a Package
Weight 7 Lbs. per Dozen
In Cases of 6, 12 and 18 Dozen Bricks

IN CASES OF 100 CAKES Per Case

No. 101—First Grade..... $13 00
No. 102—Second Grade..... 10 50

Weight 60 Lbs per Case

ELECTRIC HEATERS

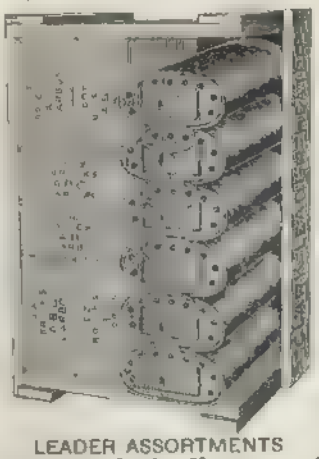


For Automobile Engines and Radiators. Keeps the Engine warm in the coldest weather; Can be attached to any Electric Light Socket; Either Direct or Alternate Current and delivers a powerful, uniform heat for less than one cent per hour.

Each

No. 30—Consists of an Electric Heater, with Attachment Plug and 10 ft. of Cord; Size of Heater 3x7½ in., 100 Watt..... $6.00

One in a Carton; Weight 1¼ Lbs. Each



LEADER ASSORTMENTS

These Clark Leader Heaters are 12 in. Long, Oval Shape; Made entirely of Metal, not covered; well made, Strongly Riveted.

Per Asst

No. 625—Assortment contains 6 Leader Heaters and Six Dozen A, B, C, Coal Bricks..... $18 00

One Assortment in a Case
Weight 75 Lbs per Assortment

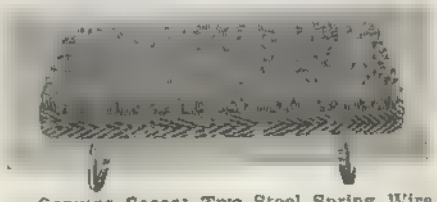
PEERLESS ASSORTMENTS

Per Asst

No 12 Assortment contains Two No 5B Oval Heaters, Two No. 3D Oval Heaters, Two No. 7D Triangular Heaters; and Six Dozen Clark Coal Bricks of the best grades..... $24 00

One Assortment in a Case
Weight 78 Lbs per Assortment

RUNNING BOARD MATS



Genuine Cocoa; Two Steel Spring Wire Holders are woven firmly in the Back of the Mat and fit tightly over the Running Boards, holding the Mat securely on the Step. Per Dozen

No. 10—Size 8x14 in..... $20.00
No. 20—Size 10x14 in..... 24.00

Weight 15 Lbs. per Dozen

SAFETY STEP PLATES

STANWOOD Each

No. C—High Grade Rubber Stock, vulcanized on to a chemically treated perforated Steel Base Plate; 24 Longitudinal Rubber Ribs remove dirt or mud from the shoes and afford a firm foot hold. Easily cleaned and will not become saturated with moisture. Size 8x11½ in..... $1.50

Four in a Container 36 in a Carton
Weight 1½ Lbs. Each

Each

No. 80—Accelerator Heel Plate, Size 4x11½ in., otherwise same as above; Steadies the foot in driving over bad roads and prevents the heel wearing a hole in the floor..... 0 80

Open Stock; Weight ¾ Lb. Each

How UTILITY PROTECTED HEATER Is Attached to the Exhaust

UTILITY AUTOMOBILE HEATERS

This Heater is attached to the Exhaust and keeps the Car warm, free of cost, protects the health of the occupants and makes Winter driving a Pleasure; Every Car Owner will appreciate the comfort derived from one of these Heaters; the Heat can be controlled by a Regulating Valve on Inlet Head of Heater; Serves as a Heater for 8 months and as an ornamental Foot Rail without heat for the rest of the year; Can be installed in Half an Hour.

Each

No. 15—Standard Model for all Cars, except the Ford; Length 28 in., Diam. 3 in.; Nickel Plated Perforated Guard; 4 ft. of Flexible Tubing; Complete ready to install..... $30.00

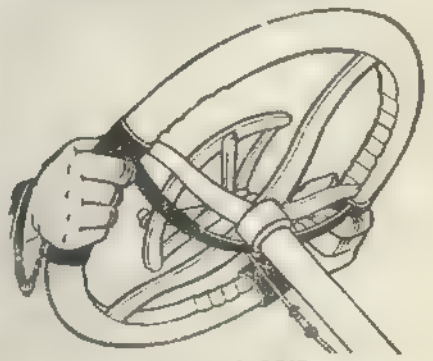
One in a Carton; Weight 13 Lbs.

Each

No. 75—Utility Junior for Ford Cars only; Same as above, except smaller Size..... $15 00

One in a Carton; Weight 8 Lbs. Each

HAND WARMERS



ELECTRIC GRIP

Consists of Two Electrically Heated Pads which are conveniently laced to the Steering Wheel; Each Pad contains a Heating Element, covered with Waterproof Chase Leather and a Handy Switch is attached to a Cord which connects with the Storage Battery or Generator; For Ford Cars, the connection is made directly to the Magneto.

It consumes less than one-half as much current as the Headlights; When attached to the Generator, the Grip Warmers operate only while the Motor is running; When connected to the Storage Battery, they warm up independently of the Motor.

Per Set

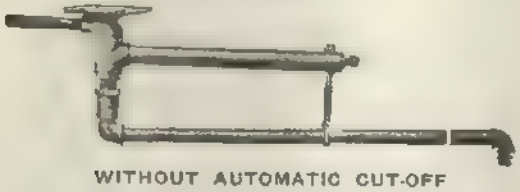
No. 1—Set includes Two Neat, Adjustable Hand Grips, Connecting Strap, Switch and sufficient Cord to make connection with Storage Battery, Generator or Ford Magneto..... $9.00

One Set in a Box; Weight 8 Oz. per Set

OVERHEAD AUTOMOBILE WASHERS

On the No. 3M the Hose is secured to Nipple on the end of the Hose Arm and by pulling down slightly on the Hose the water supply is turned on. By raising the Hose a trifle, the water is instantly shut off. It is easily operated with one hand by means of the Ratchet Pulley which is attached. The operator can regulate and control the stream of water to suit his purpose, by simply raising or lowering Hose. In whatever position the operator puts the Hose for the desired stream wanted, the Ratchet will hold it in position, and the volume of water will continue to flow until the operator desires to shut it off, which is done by simply raising the Hose a trifle, then the Valve will close instantly.

Not Carried in Stock; Shipped Promptly from Factory in Wisconsin

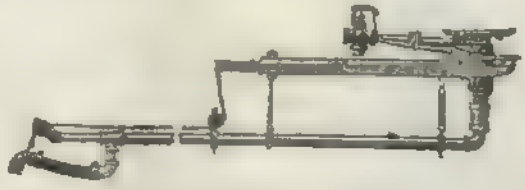


WITHOUT AUTOMATIC CUT-OFF

Hose Arm is 6 ft. Long and 1 in. Diam., with ¾ in. Brass Hose Nipple; Supporting Arm is 2 ft. Long and 1½ in. Diam.; Projection from Ceiling 12 in.; for use only where water is controlled by a Valve placed at some convenient location in the Supply Pipe leading to it; all Bearings are Brass and Babbit Metal.

	Each
†No. 1MG—Galvanized Iron Pipe and Fittings	$19.00
†No. 1MP—Polished Brass Pipe and Fittings	45.00
†No. 1MN—Nickel Plated Brass Pipe and Fittings	50.00

Approximate Weight 50 Lbs. Each



WITH AUTOMATIC CUT-OFF

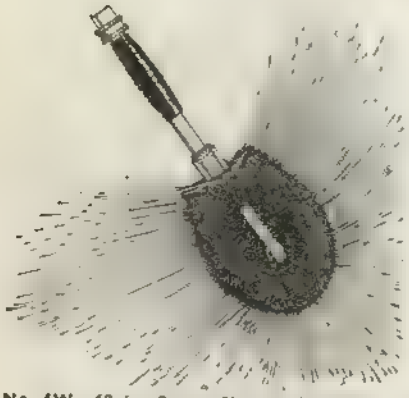
Hose Arm is 6 ft. Long and 1 in. Diam., with ¾ in. Brass Hose Nipple, also Brass Ratchet and Elbows; Supporting Arm is 2 ft. Long and 1½ in. Diam.; Projection from Ceiling 15 in.; Can also be arranged to operate the Automatic Water Cut-Off without the Ratchet Pulley, by disengaging same and putting more tension on the Main Spring; by pulling down slightly on the Hose the water supply is turned on. As soon as the Hose is released, the Valve closes, and the water is instantly shut off.

	Each
†No. 3MG—Galvanized Iron Pipe and Fittings	$45.00
†No. 3MP—Polished Brass Pipe and Fittings	75.00
†No. 3MN—Nickel Plated Brass Pipe and Fittings	80.00

Approximate Weight 100 Lbs. Each

†For Factory Shipment Only; Prices do not include Hose or Nozzle

SANITAX FOUNTAIN AUTO BRUSHES



For Public or Private Garages, Livery Stables, etc., for Cleaning Quickly Automobiles, Motorcycles, Bicycles, Coaches, Carriages, Wagons, Trucks, etc.

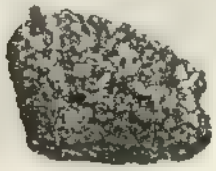
Cleans the Surface of the Finest Car instantly without a Scratch or a Streak; Keeps the Automobile clean, the Guards, Running Gear and Body spotless, with the least amount of effort and expense; Saves time and eliminates drudgery; is automatic in action—removes the hardest clay, mud or grit from the surface to which it is applied almost instantly, without a Scratch or Streak; the constant stream of clear, running water passing through the Brush from an ordinary garden hose, not only loosens the mud, but washes it away. The sand, grit or mud will not stick on the hair, the water flushes it off instantly. As a result grit, gravel or sandy particles, that become imbedded in the pores of an ordinary carriage sponge, never find lodgement in the Sanitax.

Each

No. 1W—13 in. Spray Nozzle, is Rifle Barrel Shape, handsomely Plated, and made to withstand the highest possible hydraulic pressure. The Needle Spray perforations are made with scientific accuracy to insure a steady, concentrated, forceful, cleansing spray at all times, exactly where it is needed. This Spray penetrates through the Brush Coil to the surface of the car, or the Brush can be removed and the spray can be applied direct, as preferred. The Spray Nozzle is made with a corrugated, black enameled handle or grip, and is instantly adjusted to any garden or vacuum hose. The Flexible Brush Coil is of the best grade of standard black bristles, of proper stiffness, to remove hardened mud or gravel yet soft enough to prevent scratching the finest surface. Bristles are everlastingly twisted into a non-rustible spring coil, so that they cannot loosen or come out. Both the Spray Nozzle and Brush Coil fit and lock together and can be instantly separated $3.00

One in a Box; Weight, Boxed, 2 Lbs. Each

SPONGES



For Washing Automobiles, Vehicles, etc.

	Per Dozen
No. 74—Genuine Sheep Wool, Washed Forms, 6 to 8 per Lb.	$20.00
No. 73—Genuine Sheep Wool, Washed Forms, 8 to 10 per Lb.	18.00
No. 76 Genuine Sheep Wool, Washed Forms, 14 to 16 per Lb	15.00
No. 75—Genuine Sheep Wool, Washed Forms, 25 to 28 per Lb.	12.00
No. 77—Genuine Florida, Yellow, 8 to 10 per Lb.	7.50

Open Stock

BLACK HORN CHAMOIS SKIN

Pure Oil Tannage; Uniform Quality. Will not crack nor harden; can be washed and will dry out soft and velvety until skin is worn out.

Nos.	Approx. Sq. Ft.	Each
1	1	$0.35
1½	1½	.50
2	2	.65
3	3	.90
4	4	1.20
5	5	1.50
6	6	1.75

Each skin is packed in a separate envelope; seven sizes Nos. 1, 1½, 2, 3, 4, 5 and 6, the numbers representing the approximate number of square feet in each skin.

BLACK HORN HANDY RUBS

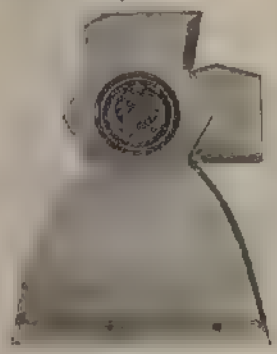
For Polishing Brass, Glass, Furniture, Hardwood Floors, Automobiles, Stoves, Shoes, etc.; Handy for Travelers, Autoists, etc., and serviceable in Kitchens, Stores, Offices, etc.

	Per Dozen
No. 10—Made of Oil Tanned Chamois Skin Pieces, Sewed to Cloth Back, Size 5x9 inches Web Back Strap, Riveted on	$3.50

Weight 2 Lbs. per Dozen

BROAD OR BENCH HATCHETS

For General Use by Carpenters, Builders, Farmers and for Household Purposes



ZENITH, Warranted

Extra Quality Crucible Steel; Specially Tempered, Cutting Edge and Head, Perfect Bevel, Ground and Honed; True Hang, Selected Hickory, Shaped Handle; Zenith Wedge Lock

FULL POLISHED AND ETCHED

Nos.	ZB1P	ZB2P	ZB3P
Size	1	2	3
Width Cut, In.	3½	4½	5
Weight Dozen, Lbs.	21	25	30
Per Dozen	$13.50	14 50	17.00

HALF POLISHED

Nos.	ZB1G	ZB2G	ZB3G	ZB4G	ZB5G
Size	1	2	3	4	5
Width Cut, In.	3½	4½	5	5½	6
Weight Dozen, Lbs.	21	25	30	40	45
Per Dozen	$12.00	13 00	15 00	16 50	18.50

One-Third Dozen in a Box

HARTFORD, GOLD BRONZED

Extra Quality Tool Steel, Polished Bit and Head; Crucible Steel Cutting Edge, Perfectly Tempered, Ground and Honed; Selected Hickory, Shaped Handle

Nos.	HB2G	HB3G	HB4G	HB5G
Size	2	3	4	5
Width Cut, In.	4½	5	5½	6
Weight Dozen, Lbs.	25	30	40	45
Per Dozen	$11.50	13 00	14 50	16 50

Half Dozen in a Box

NORTHERN KING, BLACK FINISH

Steel, Polished Bit and Head; Well Laid Out; Selected Hickory Handle

Nos.	NB2B	NB3B	NB4B	NB5B
Size	2	3	4	5
Width Cut, In.	4½	5	5½	6
Weight Dozen, Lbs.	25	30	40	45
Per Dozen	$11.50	13.00	14.50	16 50

Half Dozen in a Box

BROAD OR BENCH HATCHETS

ZENITH, DOUBLE BEVEL, HALF POLISHED

Polished Bit and Head, Balance Gold Bronzed, Extra Quality Crucible Steel; Specially Tempered Cutting Edge and Head; Double Bevel Ground and Honed; Selected Hickory Handle; Zenith Wedge Lock

No.	ZB3D
Size	3
Width Cut, In.	5
Weight Dozen, Lbs.	36
Per Dozen	$16.50

FLOORING HATCHETS

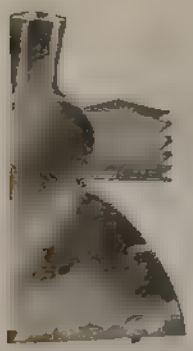
ZENITH, HALF POLISHED

Polished Bit and Head, Balance Gold Bronzed; Extra Fine Grade Crucible Steel; Specially Tempered Cutting Edge and Head; Perfect Bevel, Ground and Honed; Selected Hickory Handle; Zenith Wedge Lock.

No.	ZF2G
Size	2
Width Cut, In.	4¼
Weight Dozen, Lbs.	30
Per Dozen	$15.50

One-Third Dozen in a Box

HALF HATCHETS



Unconditionally Guaranteed

Made from Best Grade Crucible Tool Steel, Perfectly Tempered Bit and Poll; Razor Edge Ground and Honed, Perfect Bevel, Selected Hickory Handle, Specially Shaped; Zenith Wedge Lock

ZENITH, FULL POLISHED

Nos.	ZH2P	ZH3P
Width Cut In.	2½	3¾
Weight Dozen Lbs	24	30
Per Dozen	$11.50	12.00

One-Third Dozen in a Box

ZENITH, HALF POLISHED

Nos.	ZH2G	ZH3G
Width Cut, In	2½	3¾
Weight Dozen Lbs	24	30
Per Dozen	$10.25	10 75

One-Third Dozen in a Box

NORTHERN KING

Hand Forged, Natural Black Finish; Good Design, No. 1 Hickory Handle

Nos.	NK2H	NK3H
Width Cut, In	2½	3¾
Weight Dozen, Lbs.	24	30
Per Dozen	$9.00	9 50

Half Dozen in a Box

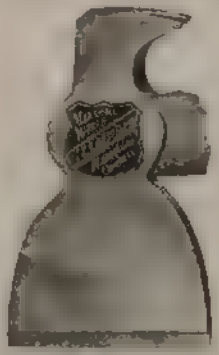
CLAW HATCHETS

ZENITH, HALF POLISHED
Unconditionally Guaranteed

Extra Quality Crucible Steel Specially Tempered Edge and Head, Perfect Bevel, Selected Hickory Handle; Zenith Wedge Lock

Nos.	ZC1G	ZC2G	ZC3G
Width Cut In	2½	3⅜	4⅝
Weight Dozen, Lbs	21	25	30
Per Dozen	$10 25	10 75	11.25

One-Third Dozen in a Box



HARTFORD, GOLD BRONZED

Extra Quality Tool Steel Crucible Steel Cutting Edge, Well Ground, Selected Hickory Handle.

Nos.	HC1G	HC2G
Width Cut, In	2½	3⅜
Weight Dozen, Lbs	21	25
Per Dozen	$9 00	9.50

Half Dozen in a Box

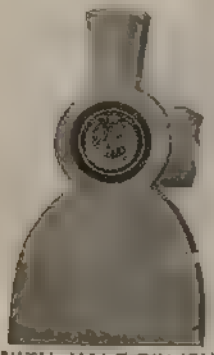
NORTHERN KING, BLACK FINISH

Tool Steel, Good Design; No 1 Hickory Handle

Nos.	NC1B	NC2B
Width Cut, In	2½	3⅜
Weight Dozen, Lbs	21	25
Per Dozen	$9.00	9.50

Half Dozen in a Box

SHINGLING HATCHETS



ZENITH, HALF POLISHED

Best Grade Crucible Steel Specially Tempered Octagon Head and Cutting Edge Perfect Bevel, Selected Hickory Handle, Zenith Wedge Lock.

Nos.	ZS1G	ZS2G
Width Cut, In	2½	3⅜
Weight Dozen, Lbs	21	25
Per Dozen	$9.25	9.75

One-Third Dozen in a Box

HARTFORD, GOLD BRONZED

Tool Steel Polished Bit and Head, Crucible Steel Cutting Edge Perfectly Tempered, Selected Hickory Handle.

Nos	HS1G	HS2G
Width Cut, In	2½	3⅜
Weight Dozen, Lbs	21	25
Per Dozen	$8.00	8.50

Half Dozen in a Box

NORTHERN KING, BLACK FINISH

Tool Steel, Good Design; No 1 Hickory Handle

Nos.	NS1B	NS2B
Width Cut, In	2½	3⅜
Weight Dozen, Lbs	21	25
Per Dozen	$9.00	9.50

Half Dozen in a Box

FANCY HATCHETS

For General use by Carpenters; Builders, Farmers and for Household Purposes

ZENITH CAR BUILDERS HATCHETS

Crucible Tool Steel, Half Polished; Perfect Bevel, Ground and Honed; Zenith Wedge Lock.

Per Dozen

No. ZCB—Size 2, 3½ in. Cut.....$12.00

Weight 26½ Lbs. per Dozen

ZENITH HALF HATCHETS

Haines Patern; Crucible Tool Steel, Full Polished; Razor Edge; Tempered Bell-Faced Head, Adze Eye; Perfect Bevel, Ground and Honed; Zenith Wedge Lock.

Per Dozen

No. ZHH1—Size 1, 3 in. Cut.....$14.50

Weight 16½ Lbs. per Dozen

ZENITH HALF HATCHETS

Haines Pattern; Crucible Tool Steel, Full Polished; Razor Edge, Hardened Round Head, Bell Face 1⅛ in Diam., 9 Rows of Points; Ground and Honed; Light and Well Balanced.

Per Dozen

No. ZLH1—Size 1, 2⅛ in. Cut.....$14.50

Weight 15½ Lbs. per Dozen

ZENITH LATHING HATCHETS

Crucible Tool Steel Full Polished; Razor Edge, Hardened Head; Light and Well Balanced; All Square Head and Neck, 2 in. Cut.

Per Dozen

No. ZL8—Boston Pattern, 8 Rows, 64 Points; Head 1⅛ in. Square; Weight 15 Oz. Each.....$16.00

No. ZL9—Chicago Pattern, 9 Rows, 81 Points; Head 1¼ in. Square; Weight 19 Oz. Each..... 16.50

No. ZL10—Duluth Pattern, 10 Rows, 100 Points; Head 1⅜ in. Square; Weight 21 Oz. Each..... 17.50

Average Weight 18 Lbs. per Dozen

ZENITH LATHING HATCHETS

Boston Pattern; Crucible Tool Steel, Full Polished; Razor Edge

Per Dozen

No. ZBL8—Round Neck; Square Face, 1⅛ in. Diam.; 8 Rows, 64 Points; 2 in. Cut; Used in all Sections of the Country $16.00

Weight 16 Lbs. per Dozen

UNDERHILL LATHING HATCHETS

Genuine; Made from Best Steel, Charcoal Tempered, Full Polished; Short, Stout, Square Head.

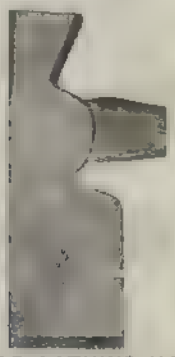
Per Dozen

No. SL8—Star, Boston Pattern; 8 Rows, 64 Points; 2 in. Cut; Diam. of Face 1¼ in.; Weight 19 Oz. Each....$18.00

No. SL9—Star, Chicago Pattern; 9 Rows, 81 Points; 2 in. Cut; Diam. of Face 1¼ in.; Weight 20 Oz. Each..... 20.00

No. SL10—Star, Duluth Pattern; 10 Rows 100 Points; Weight 22 Oz. Each; Otherwise same as above..... 22.00

Weight 16 Lbs. per Dozen

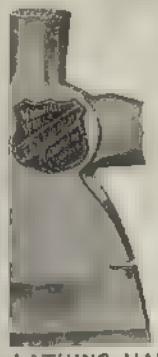


HARTFORD LATHING HATCHETS

Per Dozen

No. HL9—Chicago Pattern; Square Head and Neck; Head 1⅜ in. Square; 9 Rows of Points; Ground and Honed; 2 in. Cut.....$16.50

Weight 16 Lbs. per Dozen



HARTFORD LATHING HATCHETS

Extra Quality Tool Steel; Polished Bit and Head, Balance Gold Bronzed; Tempered Octagon Steel Head and Cutting Edge; Ground and Honed; Selected Hickory, Shaped Handle.

Per Dozen

No. HL1G—Size 1, 2½ in. Cut.....$8.00

Weight 17 Lbs. per Dozen

ZENITH ROOFERS' HATCHETS

The Handiest Tool Made

Per Dozen

No. ZR—Crucible Tool Steel, Full Polished; Light and Well Balanced; Box Head; Complete with Shingling Gauge $18.00

Weight 12 Lbs. per Dozen

SHINGLING AND BOX HATCHETS

ZENITH SHINGLING HATCHETS

Crucible Tool Steel, Full Polished, Razor Edge, Tempered Bell Faced Head, Adze Eye, Selected Hickory Handle; Zenith Wedge Lock.

Per Dozen

No. ZSH1—Size 1, 3¼ in. Cut.....$14.50

Weight 19 Lbs. per Dozen

ZENITH BOX HATCHETS

Per Dozen

No. Z13—2⅛ in. Cut; Extra Quality Steel, Full Polished and Stamped; Milled Head, 13 Rows, 169 Points, Rounded Top, Size 1 1/16x1¼ in.; Crucible Steel Cutting Edge, Perfect Bevel, Ground and Honed; Selected Hickory Handle, with Beveled End to prevent catching coat sleeve; Zenith Wedge Lock ...$18.00

Weight 15 Lbs. per Dozen
Half Dozen in a Box

HARTFORD BOX HATCHETS

Improved Pattern Two Patent Nail Slots

Per Dozen

No. H7 2⅛ in. Cut: Extra Quality Forged Steel; Gold Bronzed, Polished Bit and Head; ⅞ in. Square Milled Head, with 7 Rows of Points; Selected Shaped Hickory Handle, with Zenith Wedge Lock; Hard Tempered and Fully Guaranteed..$8 50

Half Dozen in a Box, Six Dozen in a Case
Weight 12 Lbs. per Dozen

PEARSON SHINGLE NAILING MACHINES

A time, labor and money saver; no bruised fingers; no sore Mouths from holding Nails in cold weather. May be used in Coldest Weather; easily handled with Gloves or Mittens and on any shape roof.

Frame is Malleable Iron; Hopper and Slides of Heavy Tin; there are three Slits in Bottom of Hopper into which Nails drop automatically and hang by heads; Nails then pass into a similar slit in incline, where they slide down to the Catch Spring, which holds them under the Plunger until it sets the nail in the Shingle.

Length 14 in.; Height 7½ in.; Size Hopper 2½ in. Wide, 7 in. Long, 3 in. Deep; Capacity About ¾ Lb. Nails.

Each

No. 13—Painted Red; Takes 3d Galvanized 13 Ga. 1¼ in Wire Nails $6.00

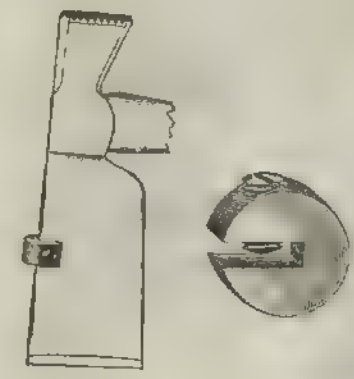
No. 14—Painted Blue; Takes 3d Common 14 Ga. 1¼ in. Wire Nails 6.00

One in a Box; Weight 2 Lbs. Each

EXTRA PARTS

Each		Each
Top Springs $0.35	Plungers $0.60	

SHINGLING HATCHET GAUGES



COLLAR PATTERN

A Handy and most Accurate Measure in laying Shingles uniformly to the Weather

Per Dozen

No. 15—¾ in. Diam., 7/16 in. Thick; Made of Solid Steel with Slot to Admit Blade of Hatchet and Set Screw to Secure Gauge at any Point Desired.....$3.00

One Dozen in a Box; Weight 1 Lb. per Dozen

GUNN SECTIONAL BOOK CASES

These Book Cases embody the "Knock Down" construction which is a most important Feature, the Desk Sections, Drawer Sections and Book Sections of any one style are Interchangeable and additional Sections can be added as desired. They can be used in the Home or Office in every conceivable place, between and under Windows, in Corners around Angles, etc. We show a variety of Designs Woods and Finishes to select from, the Glass Doors run on Roller Bearings, they can easily be lifted out without disturbing the books for cleaning the glass, it is impossible for dirt of any kind to reach the contents when the Doors are closed: the Sections are made in three Standard Heights, 9¼, 11¼ and 13¼ in.; These Sections are of Uniform Depth, 10½ in.; Three Lengths can be furnished, 26, 34¼ and 42⅜ in.; These are all Inside Dimensions the exterior height of Book Sections is 2 in. more than the Inside Measurements; One Book Section with Top and Base constitutes a Complete Book Case to which any desired number of Sections may be added

COLONIAL STYLE, LARGE SIZE

	Each
No. 941—Genuine Mahogany, Dull Finish; Length Over-all 51 in., Height 59⅛ in.; 16 ft. of Book Space, Capacity One Hundred to One Hundred and Twenty-five Books, or more, according to Size	$75 00

Approximate Shipping Weight 310 Lbs. Each.

COLONIAL STYLE, STANDARD SIZE

We show this beautiful Standard Size Case in Two Colors to give the purchaser an idea of the general appearance of all of our Sectional Cases the construction of all Cases shown on our pages is identically the same, the only difference being in the Style, Size and Finish. We call special attention to the **Grill Doors**, which give this Case an appearance of elegance and security and add considerably to the value from the viewpoint of protection to the contents

Length Over-all 34⅞ in., Height Over-all 57⅞ in.

	Each
No. 902O—Quartered White Oak, Dull Finish	$48 00
No. 902M Genuine Mahogany, Dull Finish	60 00

Approximate Shipping Weight 100 Lbs. Each

GUNN SECTIONAL BOOK CASES

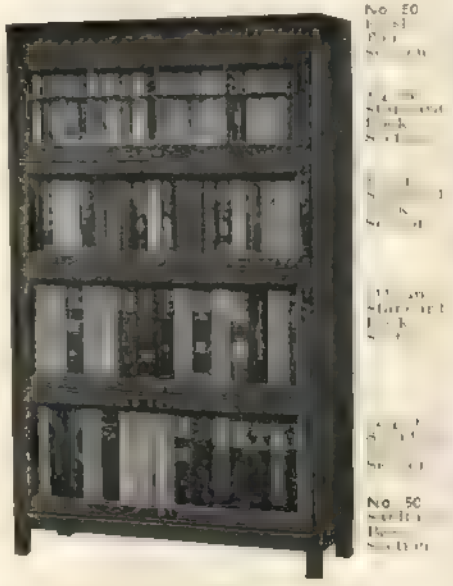
See Page 293 for Detailed Description

With Flush Top and Sanitary Base Sections

Length Over-all, 34¼ in.; Height Over-all, 57¼ in.

		Each
No. 501O	Quartered Oak	$24 80
No. 501B	Birch Imitation Mahogany	24.80
No. 501M	Solid Mahogany	33.00

Weight 100 Lbs. Each

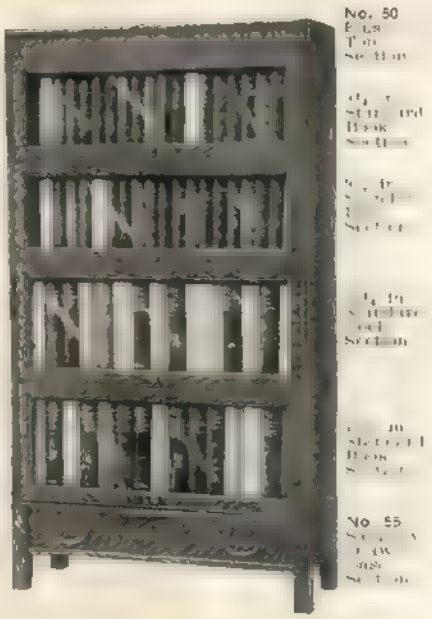


With Flush Top and Sanitary Base Sections, Showing Grill Door in Top Book Section

Length Over-all, 34¼ in.; Height Over-all 57¼ in.

		Each
No. 504O	Quartered Oak	$25 80
No. 504B	Birch Imitation Mahogany	25 80
No. 504M	Solid Mahogany	34 00

Weight 100 Lbs. Each



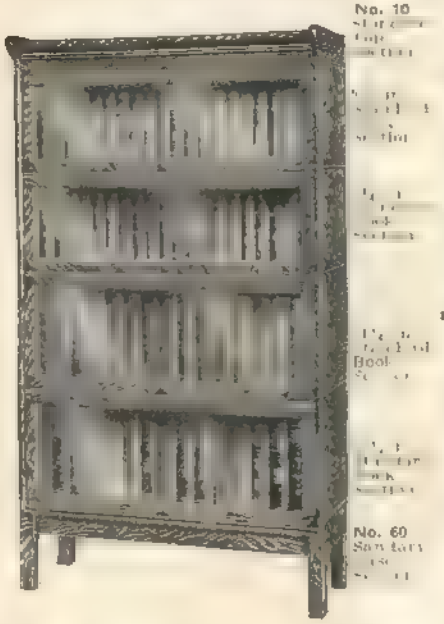
With Flush Top and Sanitary Drawer Base Sections

Length Over-all, 34¼ in.; Height Over-all, 57¼ in.

		Each
No. 551O	—Quartered Oak	$28.30
No. 551B	—Birch Imitation Mahogany	28.30
No. 551M	Solid Mahogany	37.75

Weight 100 Lbs. Each

STANDARD BOOK SECTIONS



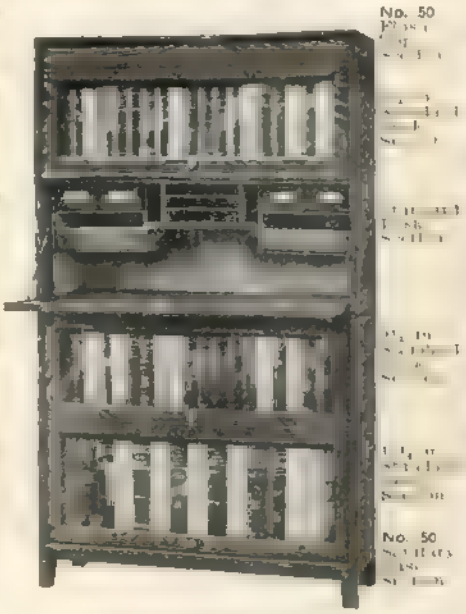
With Standard Top and Sanitary Base Sections

Length Over-all, 34¼ in.; Height Over-all 62 in.

		Each
No. 601O	—Quartered Oak	$23.30
No. 601B	Birch Imitation Mahogany	23.30
No. 601M	Solid Mahogany	31 00

Weight 100 Lbs Each

STANDARD BOOK SECTIONS



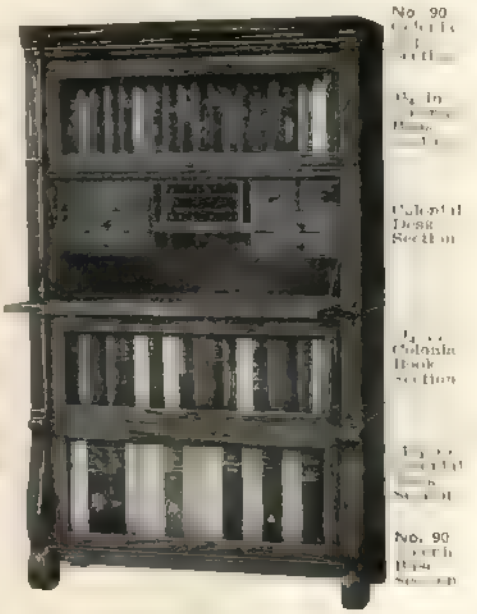
With Flush Top, Standard Desk and Sanitary Base Sections

Length Over-all, 34¼ in.; Height Over-all, 59¼ in.

		Each
No. 503O	—Quartered Oak	$34.30
No. 503B	Birch Imitation Mahogany	34.30
No. 503M	—Solid Mahogany	45 00

Weight 100 Lbs Each

COLONIAL SECTIONAL BOOK CASE



Standard Size, with Colonial Desk Section

Length Over-all, 34⅞ in.; Height Over-all, 59⅛ in.

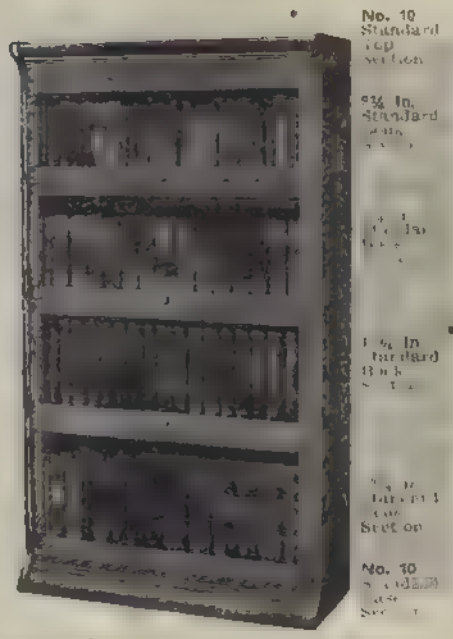
		Each
No. 901O	—Quartered Oak	$57.00
No. 901M	Solid Mahogany	72.00

Weight 100 Lbs. Each

GUNN SECTIONAL BOOK CASES

Standard Book Sections

See Page 293 for Detailed Description

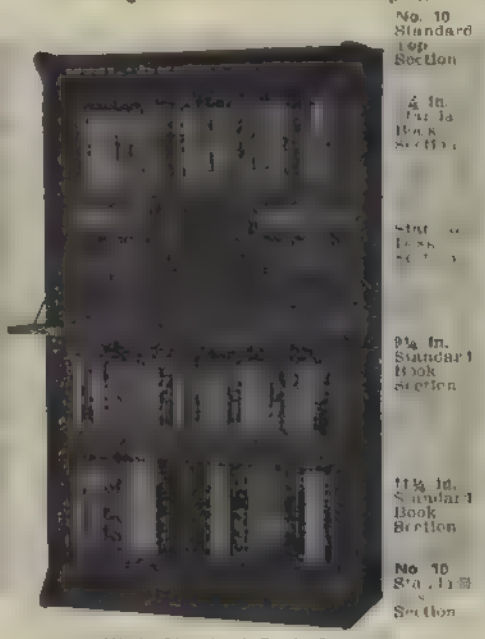


With Standard Top and Base Sections

Length Over-all, 34⅛ in.; Height Over-all, 59⅛ in.

	Each
No. 102O—Quartered Oak	$23 70
No. 102B—Birch Imitation Mahogany	23.70
No. 102M—Solid Mahogany	31.50

Weight 100 Lbs. Each

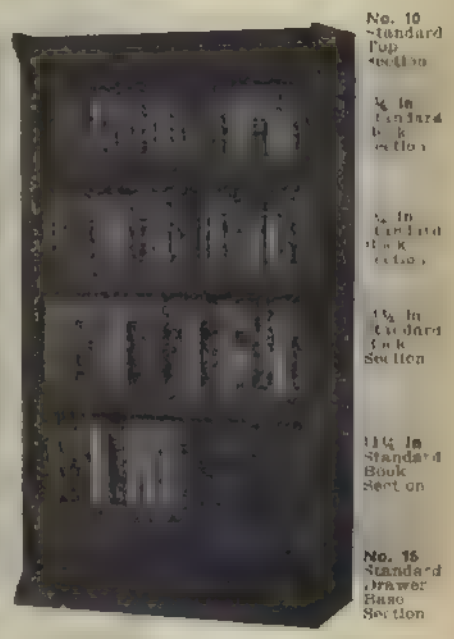


With Standard Desk Section

Length Over-all, 34⅛ in.; Height Over-all, 59½ in.

	Each
No. 103O—Quartered Oak	$32 45
No. 103B—Birch Imitation Mahogany	32.45
No. 103M—Solid Mahogany	42 50

Weight 100 Lbs. Each



With Standard Top and Drawer Base Sections

Length Over-all 34⅛ in., Height Over-all 62⅛ in.

	Each
No. 151O—Quartered Oak	$26 80
No. 151B—Birch Imitation Mahogany	26.80
No. 151M—Solid Mahogany	35 75

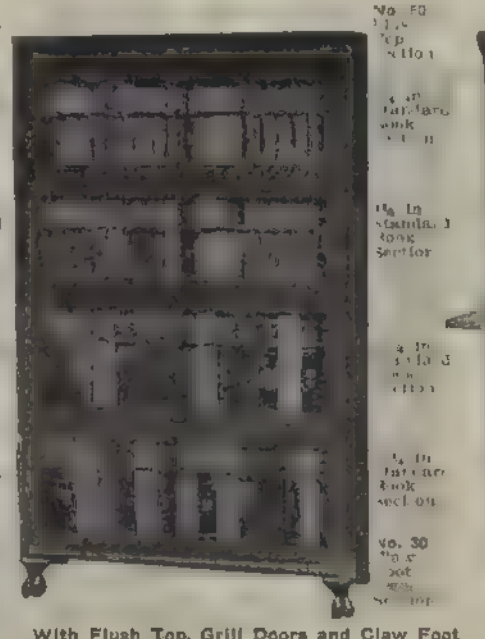
Weight 100 Lbs. Each

With Standard Top and Claw Foot Base Sections

Length Over-all, 34⅛ in.; Height Over-all, 58 in.

	Each
No. 301O—Quartered Oak	$24.80
No. 301B—Birch Imitation Mahogany	24 80
No. 301M—Solid Mahogany	32.50

Weight 100 Lbs. Each

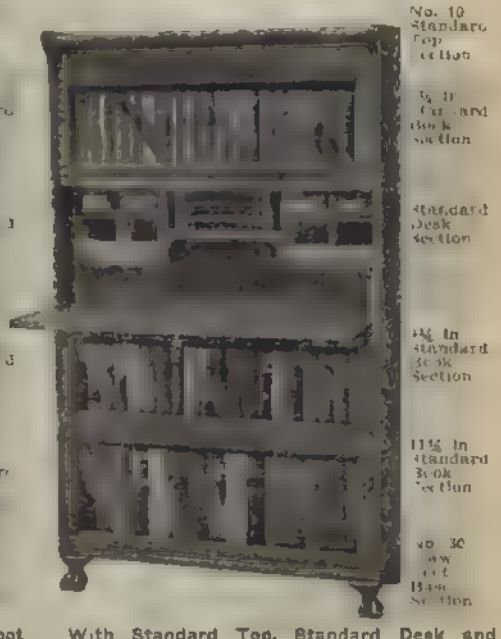


With Flush Top, Grill Doors and Claw Foot Base Section

Length Over-all, 34⅛ in.; Height Over-all, 57¼ in.

	Each
No. 302O—Quartered Oak	$30.30
No. 302B—Birch Imitation Mahogany	30.30
No. 302M—Solid Mahogany	38.50

Weight 100 Lbs. Each



With Standard Top, Standard Desk and Claw Foot Base Sections

Length Over-all, 34⅛ in., Height Over-all 60 in.

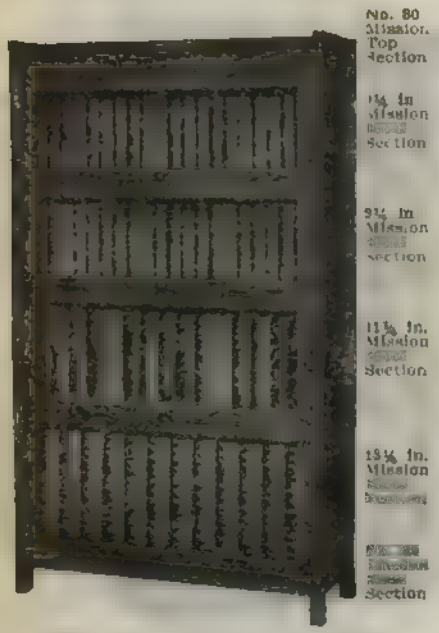
	Each
No. 303O—Quartered Oak	$34.30
No. 303B—Birch Imitation Mahogany	34.30
No. 303M—Solid Mahogany	44.50

Weight 100 Lbs. Each

GUNN SECTIONAL BOOK CASES

Mission Book Sections

See Page 293 for Detailed Description

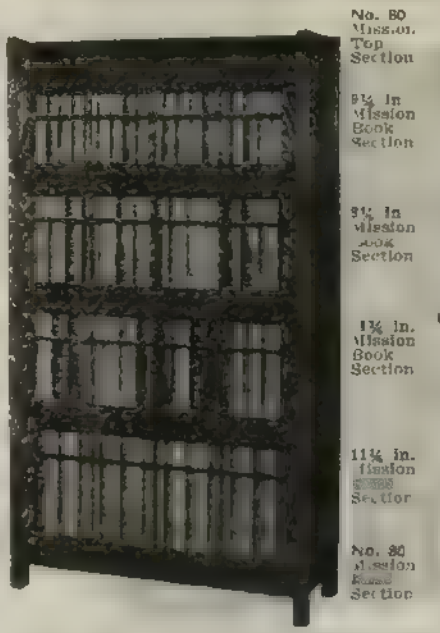


With Mission Top and Base Sections

Length Over-all, 34⅝ in.; Height Over-all, 60 in.

	Each
No. 801O—Quartered Oak	$28.05
No. 801M—Solid Mahogany	36 00

Weight 100 Lbs. Each

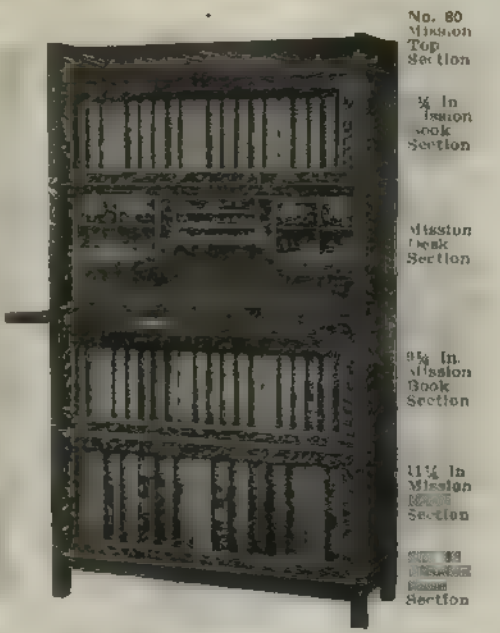


With Mission Top, Grill Doors and Mission Base Section

Length Over-all, 34⅝ in.; Height Over-all, 58 in.

	Each
No. 802O—Quartered Oak	$31.30
No. 802M—Solid Mahogany	39.00

Weight 100 Lbs. Each



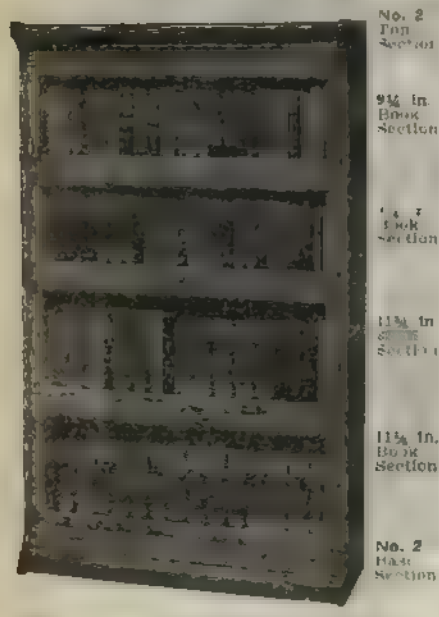
With Mission Top, Mission Desk and Mission Base Sections

Length Over-all, 34⅝ in.; Height Over-all, 60 in.

	Each
No. 803O—Quartered Oak	$37 80
No. 803M—Solid Mahogany	49 00

Weight 100 Lbs. Each

PLAIN OAK BOOK SECTIONS



With Regular Top and Base Sections

Length Over-all, 34¼ in.; Height Over-all, 57½ in.

	Each
No. 21—Plain Oak	$19.70

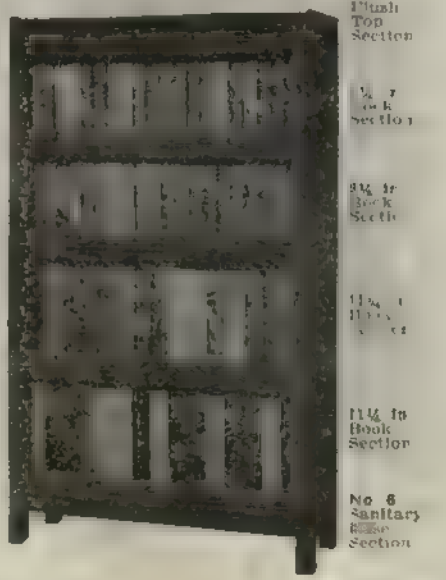
Weight 100 Lbs. Each

With Regular Top and Long Drawer Base Section

Length Over-all, 34¼ in.; Height Over-all, 61½ in.

	Each
No. 31—Plain Oak	$22.20

Weight 100 Lbs. Each



With Flush Top and Sanitary Base Sections

Length Over-all, 34¼ in.; Height Over-all, 57 in.

	Each
No. 61—Plain Oak	$20.20

Weight 100 Lbs. Each

GRINDING AND PULVERIZING MILLS

For Factory Shipment Only

ENTERPRISE

For Alternating Current

ONE-HALF HORSE POWER; DOUBLE HOPPER

For Grocers, Large Hotels and Restaurants; Grinders are Directly Connected with the Shaft of Motor, doing away with Gears; One Hopper for Grinding, the other for Pulverizing.

Each

No. 62½ Granulating Capacity 2½ Lbs. of Coffee per minute, Hopper holds 4 Lbs. of Coffee; Height 25 in., Length 27 in., Width 20 in. $320 00

Weight 130 Lbs. Each

ONE FOURTH HORSE POWER; SINGLE HOPPER

For Small Grocers, Hotels and Restaurants; Grinder is Directly Connected with Shaft of Motor, doing away with Gears; Grinds Coarse or Fine.

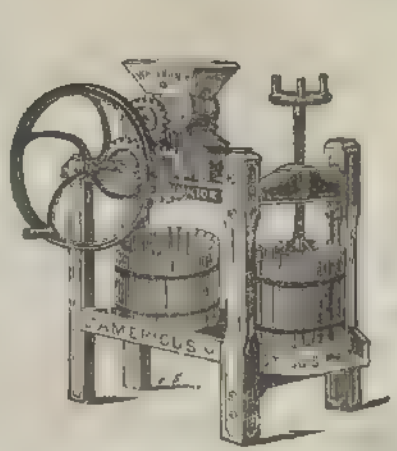
Each

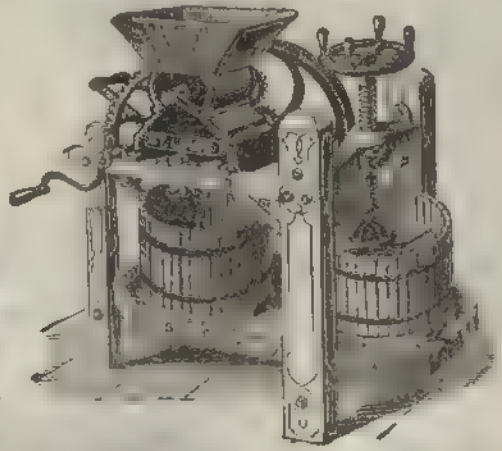
No. 82—Granulating Capacity 1½ Lbs. per minute; Hopper holds 3½ Lbs. of Coffee Height 23 in., Length 20 in., Width 10 in. .$200.00

Weight 85 Lbs. Each

CIDER AND WINE MILLS

Factory Shipment Only





Varnished Hardwood, securely bolted Frame Bottom Trough, Removable Hopper and Lever; Two Plain hardwood, removable Tubs, with heavy staves firmly riveted; two octagon sliding hardwood Baseboards and heavy Plunger Boards; Steel Press Screw with cast Socket, Top Wheel and four hand Grips. Cast Iron Roll Casing with one plain and two corrugated adjustable Rolls, triple Geared. Steel Shafts, Cast Iron Yoke, Balance Wheel and Journals.

JUNIOR	Each
No. 1J With One Turning Handle	$15 00

Weight 105 Lbs. Each

SENIOR	Each
No. 1S With Two Turning Handles	$25 00

Weight 210 Lbs. Each.

MEDIUM

No. 1M—With One Turning Handle....20 00

Weight 230 Lbs. Each

BONE CUTTERS

HUMPHREY GREEN BONE CUTTERS

Also for Vegetables, Roots, Charcoal, Ear Corn, Stale Bread, etc.

Green Bone is necessary for the health, growth and producing power of poultry. A small amount used regularly increases the profits of the hen raiser. A pound a day will be sufficient for sixteen fowls.

Open Hopper Allows Cutting without preliminary breaking and packing; no complicated parts to break; cuts quickly, any kind of bone. Unscrewing One Nut opens for Cleaning with Whisk Broom or Scraper.

*Each

No. 1—Height 35 in., Floor Space 20x20 in. For Use by the Left Hand. Spur Gears. Steel Crank Pin, Wood Crank. Sharpened Steel Bones, Strong Steel Corrugations, Neatly Painted and Decorated.....$24 00

One in a Crate; Wt. 120 Lbs. Each

COFFEE MILLS

UNIVERSAL, SHEET STEEL

Black Japanned; Grinds Coarse and Fine and will Pulverize

Per Dozen	Per Dozen
No. 110—One Pound; 8½ in. High; 6½x6½ in. Base; Side Handle $17.00	No. 109—Half Pound; 6 in. High; 5¼x5¼ in. Base....$14.00
Weight 60 Lbs. per Dozen	Weight 40 Lbs. per Dozen

Half Dozen in a Box

PARKER, VICTOR CANISTER

*Per Dozen

No. 541—Height of Box 7⅝ in., Base 5¼x5¼ in.; Varnished Dovetailed Wood Box; Iron Top and Handle; Adjustable Rapid Grinders; Canister Holds One Pound Coffee $11.00

Weight 90 Lbs. per Dozen

Half Dozen in a Box

CANISTER

Per Dozen

No. 1080—Height 7⅝ in., Base 6⅝x6⅝ in., Dovetailed, Varnished Whitewood Box; Enameled Iron Top, Crank and Side Handle; Adjustable Grinders; Holds One Pound of Coffee. Air Tight $8.50

Weight 50 Lbs. per Dozen

PARKER, NATIONAL

Coppered Iron Top with Handle for Steadying; Varnished Wood Box, Adjustable Grinders.

Nos.	430	431
Size Box, In.	4½x4¼x4¾	5x5x4¾
Weight Dozen, Lbs.	54	66
Per Dozen	$11.50	13.00

Half Dozen in a Box

SUN

Per Dozen

No. 400—Height 4¾ in., Base 5x6 in., Dovetailed, Varnished Whitewood Box; Coppered Iron Swinging Cover, Crank and Side Handle; Adjustable Grinders; Wood Drawer..$9.00

Half Dozen in a Box; Wt. 50 Lbs. per Doz.

Per Dozen

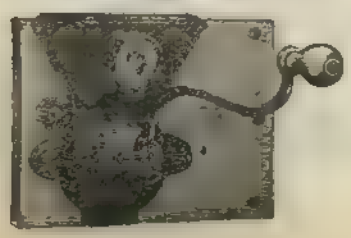
No. 1088—Height 3¾ in., Base 6x6 in.; Varnished Dovetailed Wood Box, Japanned Iron Hopper and Crank, Adjustable Steel Alloy Grinders..$5.00

Half Dozen in a Box; Wt. 35 Lbs. per Doz.

Per Dozen

No. 1010—Height 5 in.; Base 6x6 in.; Varnished Dovetailed Whitewood Box, Enameled Iron Swing Cover, Sunken Hopper, Holds One Cup of Coffee; Adjustable Steel Alloy Grinders; Dovetailed Wood Drawer $8.40

Half Dozen in a Box; Weight 50 Lbs. per Dozen



IMPROVED AMERICAN

For Hotel and Cook Camp

Japanned Cast Iron Grinding Case and Handle; Tin Hopper, with Hinged Lid; Varnished Wood Back.

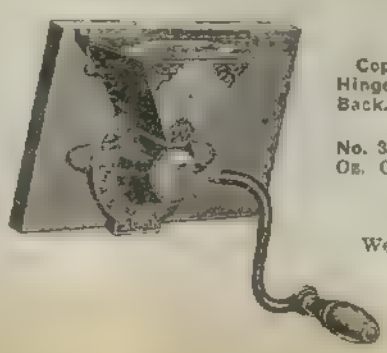
Per Dozen

No. 060—Medium Size; on 6½x8½ in. Back; for Household Use; Wt. 40 Lbs. per Doz. $7.00

Half Dozen in a Box

No. 090—Extra Large; on 11x14 in. Back; for Hotel Use Wt 129 Lbs. per Dozen $18.00

Four in a Box



PARKER

Coppered Cast Iron Body, Hinged Cover, Varnished Maple Back.

Per Dozen

No. 350—Small Size, Capacity 6 Oz. Coffee; on 8½x6 in. Back $8.00

Half Dozen in a Box

Weight 50 Lbs. per Dozen

COFFEE, DRUG AND SPICE MILLS

JEWEL

Per Dozen

No. 1—Varnished Wood Back, 14 in. High, 4½ in. Wide, ⅝ in. Thick; Red Japanned Grinding Case and Handle; Tin Top and Cup, Glass Canister Marked in Fractions of Pound, One Pound Capacity; Adj. Chilled Grinders $12 00

Four in a Box
Weight 65 Lbs. per Dozen

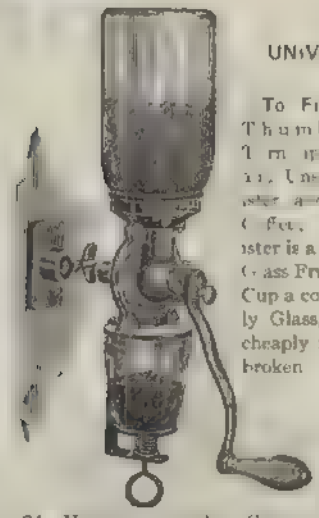
Extra Canisters for above..... 4 00
Weight 15 Lbs. per Dozen

REGAL

Per Dozen

No. 44—Height 12 in., Diam. of Can 4½ in., Black Japanned Body; Air tight Tin Canister, with Screw Top; Capacity One Pound; Iron Grinding Case and Grinders; Nicely Decorated..... $9.00

Half Dozen in a Box; Weight 43 Lbs. per Dozen



UNIVERSAL

To Fill—Loosen Thumb Screw, Turn upside down and Unscrew Canister and pour in Coffee, the Canister is a two Quart Glass Fruit Jar, the Cup a common Jelly Glass, both are cheaply replaced if broken

Per Dozen

No. 24—Height [illegible] inches, Canister Holds One Pound Coffee, Iron Grinders; Black Japanned Body, Gilt Letters; Cherry Finished Handle; 3½x1½ in. Base Plate $10 00

Half Dozen in a Box. Weight 83 Lbs. per Dozen

MAHOGANY

Per Dozen

No. 6—Varnished Wood Back, 12½ in. High., 4½ in. Wide; Black Japanned Canister, Holds One Pound of Coffee; Heavy Oval Pearl Glass in Front Showing Supply of Coffee; Adjustable Chilled Grinders.....$8 40

Half Doz. in a Box
Wt. 37 Lbs. per Dozen

Each

No. 20—12½ in. High, 6¾x5¼ in. Base, Countersunk for 2 No. 10 Screws, Iron Hopper Holds ¼ Lb. of Coffee, Grinds 6 Oz. per Minute; Two 9 in. Fly Wheels..... $5 00

Three in a Crate; Weight 27 Lbs. Each

Each

No. 11—12½ in. High, 6¾x5¼ in. Base, Countersunk for 2 No. 10 Screws, Iron Hopper Holds ¼ Lb. of Coffee and Grinds 6 Oz. of Coffee per Minute, One 9 in. Fly Wheel $3 75

Three in a Crate; Weight 15 Lbs. Each

Two Fly Wheels; Nickel Plated

WITH BRASS HOPPER

Nos.	40	60
Height, In.	20½	24
Fly Wheels, In.	10¾	12½
Capacity, Lbs.	1	1½
Grinds Minute, Lb.	¼	¼
Weight Each, Lbs.	35	58
Each	$8 00	12.00

WITH IRON HOPPER

Nos.	30	50
Height, In.	15	17
Fly Wheels, In.	10¾	12½
Capacity, Oz.	8	12
Grinds Minute, Lb.	¼	¼
Weight Each, Lbs.	40	45
Each	$5.50	8.00

One in a Crate

WITH NICKELED BRASS HOPPER

Nos.	100	140
Height, In.	28	32
Fly Wheels, In.	19½	25
Capacity, Lbs.	4½	7½
Grinds Minute, Lbs.	1½	1½
Weight Each, Lbs.	102	198
Each	$21.00	28.00

WITH IRON HOPPER

Nos.	90	120
Height, In.	24	32
Fly Wheels, In.	19½	25
Capacity, Lbs.	3	5
Grinds, Minute, Lbs.	1½	1½
Weight Each, Lbs.	130	190
Each	$16.00	23.00

One in a Crate

FLOOR COFFEE MILLS

Detachable Grinding Surface, Chilled and Hardened, Hopper holds 5[illegible] Lbs. of Coffee

Each

No. 160—Height 68 in.; Base 25½x25 in., Two 31 in. Fly Wheels; Iron Hopper; Grinds 1½ Pounds of Coffee per Minute. ...$40 00

One in a Crate
Weight 381 Lbs. Each

CHURNS

MARSWELLS BARREL

Varnished Oak Staves, Oak Bottom, Galvanized Steel Bails, Rim Bars and Rings Aluminum Painted Hoops; White Pine Head; Hardwood Frame strongly made and Bolted

Nos.	0	1	2	3	4
Cap., Gals.	5	9	15	20	25
Churns, Gals	1 to 2	1 to 4	2 to 7	3 to 9	4 to 12
Wt. Ea., Lbs.	26	33	35	45	58
Each	$8.00	9.00	10.00	12.00	14.00

Open Stock

DAZEY METAL CHURNS

Frame is made of Iron and Steel Aluminum Bronzed; Two Piece White Maple Cover; Seasoned White Maple Dasher; Tinned Steel Dash Rod; Cast Gears; Best quality Tin Receptacles, Enameled Blue on Outside, Aluminum Lettered; Smooth inside, easily cleaned and perfectly sanitary as there is nothing to absorb the cream; the correct temperature is easily obtained by placing the Receptacle in warm or cool water; the Dash is adjustable up or down, depending on amount of cream to be churned.

Nos.	200	275	400	600
Capacity, Gals.	2	3	4	6
Churning Cap., Gals.	1	2	3	4
Weight, Lbs.	13	17	25	37
Each	$4.00	4 50	6 50	7.50

ANTI-BENT

Selected White Ash, Stained and Varnished Body Bound by Adjustable Hoops and Rods; has Three Movements, Slow, Medium and Fast; has Hole and Galvanized Spout at End to Draw off Buttermilk, easy to Clean and a very Rapid Churner.

Nos.	1AB	2AB	3AB
Capacity, Gals.	9	12	15
Churns, Gals.	5	7½	10
Weight Each, Lbs.	37	42	49
Each	$6.00	7.00	8.00

One in a Crate

DASH

White Cedar, Selected Stock, the Staves are Securely held by Steel Bands, Sunken Lid, Double Acting Dashes.

Nos.	1D	2D	3D
Capacity, Gals.	5	7	10
Height, In.	18	25	28
Wt. per Doz., Lbs.	180	216	266
Per Dozen	$20.00	22.50	25.00

Half Dozen in a Crate

WHITE CEDAR

White Cedar Selected Stock, Varnished; Crank is held in place by Latch, is easily withdrawn and dasher removed for cleaning and washing out Churn.

Nos.	1C	2C	3C	4C
Capacity, Gals.	2¼	4	7	10
Churns, Gals.	1	2	4	7
Weight Each, Lbs.	14	18	22	30
Each	$2.50	3.00	3.50	4.00

One in a Crate

DAZEY GLASS

For Small Churnings; Sanitary, Easy Running, Easily taken apart to clean; Clear Glass Body; Aluminum coated Castings, Heavily Nickel Plated Cap, Hardwood Turbine Dasher

Nos	10	20	30	40
Cap., Pints.	3	5	7½	9
Churns, Pints	1½	2½	3¾	4½
Wt. Doz., Lbs.	30	67	75	81
Per Dozen	$18.00	25.50	30.00	43.00

One in a Carton

EXTRA GLASS JARS

For Nos	10	20	30	40
Per Dozen	$3.00	6.00	9.00	12.00

CHURN REPAIRS

FOR MARSWELLS BARREL CHURNS

For Factory Shipment Only

No. 1—COVER FRAMES

For Churns, Sizes	0	1	2	3	4
Weight, Lbs.	2	2½	2¾	3½	4
Each	$0.40	.45	.60	.65	.80

No 2—CHURN RIMS

For Churns, Sizes	0	1	2, 3	4
Weight, Lbs.	1½	1¾	2½	4½
Each	$0 80	90	1 00	1 20

No. 3—CHURN COVERS COMPLETE

For Churns, Sizes	0	1	2	3	4
Weight, Lbs.	3½	3¾	5	5¾	6½
Each	$1.00	1 15	1.25	1.45	1.75

No. 4—CRANK TRUNIONS

For Churns, Sizes	0, 1, 2, 3	4
Weight, Lbs.	1	1¼
Each	$0.25	30

	Each
No. 5—For Churns, Sizes 0, 1, 2 and 3	$0 20

No 6—CRANKS

For Churns, Sizes	0, 1	2, 3	4
Weight, Lbs.	1	1¼	1¼
Each	$0 30	.40	50

No. 7—BAILS

For Churns, Sizes	0, 1	2, 3	4
Weight, Lbs.	¼	½	1
Each	.20	.25	.30

CORK PACKING

	Per Set
No. 9—For Churns, Sizes 0, 1, 2, 3, 4	$0 35

COVER FASTENERS

	Each
No. 10—For Churns, Sizes 0, 1, 2, 3, 4	$0 25

COVER BOLTS

	Each
No. 11—For Churns, Sizes 0, 1, 2, 3, 4	$0 12

CUTTER STREETHOOD BODIES

Schedule A—Standard Package Quantity, 20 of One Style or Trade Number

For 60, 80 and 100 C. P. Series and Small Multiple Mazda Lamps

A Streethood Body consists of a Vent and Iron Canopy, threaded for ¾ in. Pipe or Adapter or for 1¼ in. Pipe, a Porcelain Housing, with Attachments for either Multiple or Series Sockets and a Porcelain Enameled Reflector with 4 in. Copper Heel and with or without Diffusing Glassware, the Porcelain Housing is made for use with either Inner Wired or Outer Wired Fixtures and is Covered with a Weatherproof Glaze. Wires leading to the Socket may be tied securely in the Rim of the Porcelain thus eliminating the necessity of a Cross-Arm‡. Where list prices include Socket, Cutter Lamp Grip Multiple Sockets or Regent Film Socket * Will be supplied. Concentric Reflectors are recommended only for use with Refractors and Diffusers.

18 in. Radial Bowl Streethood Body with Canopy and Small Cross-Arm and Locknut for ¾ in. Gooseneck Suspension

Distribution Curve for 60 Candle Power Lamp in 18 in. Radial Bowl Reflector

18 in. Concentric Dome Body with Small Refractor

Distribution Curve for 60 Candle Power Series Lamp and 18 in. Concentric Dome Reflector with Refractor

18 IN. RADIAL BOWL STREETHOOD BODIES

For 60, 80 and 100 C. P. Series and 300 Watt or Smaller Multiple Type C Mazda Lamps

For ¾ in. Pipe Nos.	For 1¼ in. Pipe Nos.		Each
20001	20002	Medium Screw Socket. Weight 13⅝ Lbs	$5 70
20003	20004	Mogul Screw Socket. Weight 14 Lbs.	6 00
20005	20006	*Regent Film Socket. Weight 14¼ Lbs.	7 00
20007	20008	— Without Socket; Weight 12⅝ Lbs.	5.20

For 20 in. Radial Bowl Streethood Bodies, add $0.50 to list price and 1¼ Lbs. to Weight

18 IN. CONCENTRIC DOME BODIES

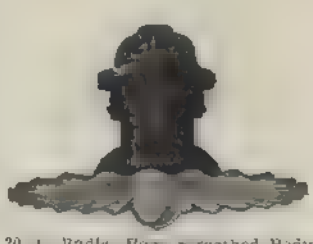
With Small Holophane Refractor, For 60, 80 and 100 C. P. Type C Series Mazda Lamps

For ¾ in. Pipe Nos.	For 1¼ in. Pipe Nos.		Each
22177	22178	Medium Screw Socket; Weight 16⅝ Lbs	$8 55
22179	22180	— Mogul Screw Socket; Weight 17 Lbs	9 25
22181	22182	*Regent Film Socket. Weight 17¼ Lbs	10 25
22183	22184	— Without Socket; Weight 15⅝ Lbs.	8 45

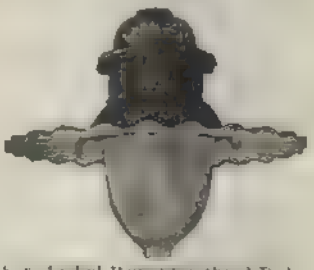
If Small Opal Diffuser is wanted deduct $2.50 from list price, and 2 Lbs. from Weight

RADIAL AND CONCENTRIC BODIES

For 250, 400 and 600 C. P. Series and Large Multiple Type C Mazda Lamps



20 in. Radial Bowl Streethood Body, with Extension



18 in. Radial Bowl Streethood Body, with Large Sol-Lux Diffuser

20 in. Concentric Dome Streethood Body, with Large Refractor

24 in. Radial Bowl Streethood Body, with Acorn Diffuser

18 IN. RADIAL BOWL BODIES

With Sol-Lux Diffuser, For 250, 400 and 600 C. P. Type C Series Mazda Lamps

For ¾ in. Pipe Nos.	For 1¼ in. Pipe Nos.		Each
22199	22200	Medium Screw Socket; Weight 17½ Lbs	$8 45
22201	22202	Mogul Screw Socket. Weight 17¾ Lbs.	8 75
22203	22204	*Regent Film Socket. Weight 18 Lbs.	9.75
22205	22206	— Without Socket; Weight 17 Lbs.	7 95

If Large Refractor is wanted, add $5.50

For 22 in. Radial Bowl Streethood Bodies, with Extension, deduct $1.75 from list price, and 2 Lbs. from Weight

20 IN. CONCENTRIC DOME BODIES

With Large Sol-Lux Diffuser; For 250, 400 and 600 C. P. Type C Series Mazda Lamps

For ¾ in. Pipe Nos.	For 1¼ in. Pipe Nos.		Each
22215	22216	— Medium Screw Socket; Weight 17⅝ Lbs.	$8.20
22217	22218	— Mogul Screw Socket; Weight 18 Lbs.	8.50
22219	22220	—*Regent Film Socket; Weight 18¼ Lbs.	9.50
22221	22222	— Without Socket; Weight 16¾ Lbs.	7.70

For 24 in. Radial Bowl Streethood Bodies, with Acorn Diffuser, add $3.00 to list price, and 9¼ Lbs. to Weight

CUTTER INCANDESCENT BRACKETS

The list price of a complete Fixture is obtained by adding to the price of the Bracket, the price of the Streethood Body selected

STYLE A BRACKETS

Bracket consists of 4 ft. Gooseneck of ¾ in. Pipe, and Grooved Pole Plate, which allows Inner Wiring, when desired.

	Each
No. 21521—With Brace Arm;; Weight 10 Lbs. Each	$1 85
No. 21522—Without Brace Arm; Weight 7 Lbs. Each	1.30

MAJESTIC BRACKETS

Made of 1¼ in. Pipe, with Flat Iron Scroll and Fancy Grooved Pole Plate, Holds the Lamp 4 ft. from the Pole. Scroll will be made of Channel Iron, instead of Flat Iron, when so ordered, at $1.00 list additional.

	Each
No. 21525—Bracket Scroll and Pole Plate Only; Weight 26 Lbs. Each.	$4.00

BOULEVARD TELESCOPE BRACKETS

The ¾ in. Pipe telescopes into the 1¼ in. Pipe, allowing adjustments of 5 to 7 ft.; a Heavy Three-Hole Pipe Plate, with Cross-Arm and Porcelain Elbow, makes the Bracket easy to put up and wire

	Each
No. 21526—With Pony Glass Insulators, Weight 33 Lbs. Each.	$4 70

‡Simple Cross-Arm No. 20752, with ¾ in. Lock Nut, may be attached to Canopy for ¾ in. Gooseneck Suspension, add 30 cents to list price

*Standard Film Socket will be furnished in place of Regent, when so ordered

For Factory Shipment Only; F. O. B. South Bend, Indiana

CUTTER SUSPENSION STREETHOODS

Schedule A—Standard Package Quantity, 20 of One Style or Trade Number

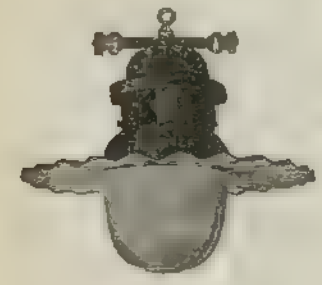
Style D with 18 in. Radial Bowl Reflector

STYLE D—LOOP SUSPENSION

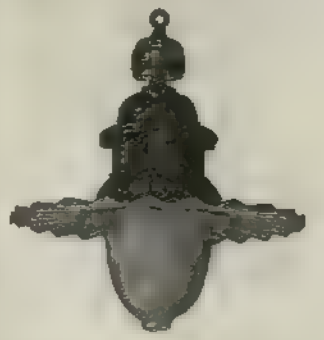
A simple form of Suspension Fixture consisting of a Streethood Body without Cross-Arm, a ¾x⅞ in. Adapter and a Malleable Iron Arc Ring.

	Each
With 18 in. Radial Bowl Reflector	
No. 21531—Medium Screw Socket; Weight 14¼ Lbs.	$ 5.95
No. 21532—Mogul Screw Socket; Weight 14¾ Lbs.	6.25
No. 21533—*Regent Film Socket; Weight 15 Lbs.	7.25
With 18 in. Radial Bowl and Large Refractor	
No. 21534—Medium Screw Socket; Weight 22¼ Lbs.	14.20
No. 21535—Mogul Screw Socket; Weight 22¾ Lbs.	14.50
No. 21536—*Regent Film Socket; Weight 23 Lbs.	15.50
With 18 in. Radial Bowl and Large Sol-Lux Diffuser	
No. 21515—Medium Screw Socket; Weight 18¼ Lbs.	8.70
No. 21516—Mogul Screw Socket; Weight 18¾ Lbs.	9.00
No. 21474—*Regent Film Socket; Weight 19 Lbs.	10.00
With 20 in. Radial Bowl Reflector	
No. 21540—Medium Screw Socket; Weight 15½ Lbs.	6.45
No. 21541—Mogul Screw Socket; Weight 16 Lbs.	6.75
No. 21542—*Regent Film Socket; Weight 16¼ Lbs.	7.75
With 20 in. Radial Bowl, with Extension	
No. 21543—Medium Screw Socket; Weight 16½ Lbs.	6.95
No. 21544—Mogul Screw Socket; Weight 17 Lbs.	7.25
No. 21545—*Regent Film Socket; Weight 17¼ Lbs.	8.25
With 24 in. Radial Bowl Reflector	
No. 21546—Medium Screw Socket; Weight 18½ Lbs.	7.70
No. 21547—Mogul Screw Socket; Weight 19 Lbs.	8.00
No. 21548—*Regent Film Socket; Weight 19¼ Lbs.	9.00
With 24 in. Radial Bowl and Acorn Diffuser	
No. 21549—Medium Screw Socket; Weight 27½ Lbs.	11.45
No. 21550—Mogul Screw Socket; Weight 28 Lbs.	11.75
No. 21552—*Regent Film Socket; Weight 28¼ Lbs.	12.75
With 20 in. Flat Radial Wave Reflector	
No. 21553—Medium Screw Socket; Weight 13 Lbs.	5 20
No. 21554—Mogul Screw Socket; Weight 13½ Lbs.	5.50
No. 21555—*Regent Film Socket; Weight 13¾ Lbs.	6.50
With 18 in. Concentric Dome Reflector and Small Holophane Refractor	
No. 21475—Medium Screw Socket; Weight 17¼ Lbs.	9.20
No. 21519—Mogul Screw Socket; Weight 17¾ Lbs.	9.50
No. 21551—*Regent Film Socket; Weight 18 Lbs.	10.50
With 20 in. Concentric Dome Reflector and Large Holophane Refractor	
No. 21562—Medium Screw Socket; Weight 22¼ Lbs.	13.95
No. 21563—Mogul Screw Socket; Weight 23¾ Lbs.	14.25
No. 21564—*Regent Film Socket; Weight 23 Lbs.	15 25
With 20 in. Concentric Dome Reflector and Large Sol-Lux Diffuser	
No. 21477 Medium Screw Socket, Weight 18¼ Lbs.	8.45
No. 21478—Mogul Screw Socket; Weight 18¾ Lbs.	8.75
No. 21479—*Regent Film Socket; Weight 19 Lbs.	9.75

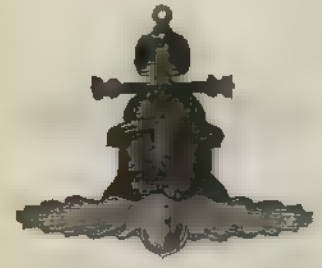
Style D, with 18 in. Concentric Dome Reflector and Small Refractor



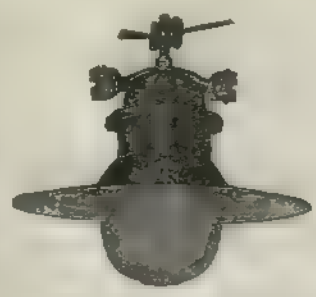
Style DX, with 18 in. Radial Bowl Reflector and Refractor



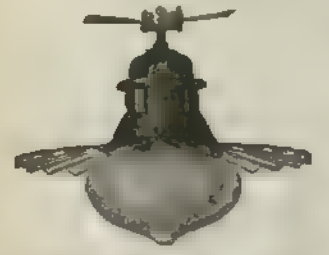
Style E, with 18 in. Radial Bowl Reflector and Sol-Lux Diffuser



Style EX, with 18 in. Radial Bowl Reflector and Simple Cross-Arm



Style FX, with 20 in. Concentric Dome Reflector and Large Refractor



Style F, with 24 in. Radial Bowl Reflector and Acorn Diffuser

STYLE DX—LOOP SUSPENSION

Similar to Style D, with Simple Cross-Arm No. 20751, which fits between the Canopy and the ¾ in. Adapter. In ordering, use same Trade Number as for Style D, but with prefix "DX." Add 25 cents to list prices and 1½ pounds to shipping weights.

STYLE E—INSULATED LOOP SUSPENSION

Consists of Style D, with a Cutter High Voltage Insulator between the Arc Ring and Adapter. Add 90 cents to list prices and 2¼ pounds to shipping weights.

STYLE EX—INSULATED LOOP SUSPENSION

Consists of Style E, with Simple Cross-Arm No. 20751. In ordering, use Trade Number for Style E Fixture, with prefix "EX." Add $1.15 to list prices and 3¾ pounds to shipping weights.

STYLE F—CABLE GRIP SUSPENSION

Consists of a Streethood Body, with ¾ in Adapter and Cable Clamp. This Clamp permits the Cable to enter at one point on one side and at a higher or lower point on the other side so the Fixture can be made level, irrespective of the varying heights of Cable Attachments. Add 40 cents to list prices and 2 pounds to shipping weights.

STYLE FX—CABLE GRIP SUSPENSION

Consists of Style F, with a Cable Cross-Arm No. 20756. In ordering, use Trade Numbers of Style F Fixtures, with prefix "FX." Add 80 cents to list prices and 4 pounds to shipping weights.

STYLE G—INSULATED CABLE GRIP SUSPENSION

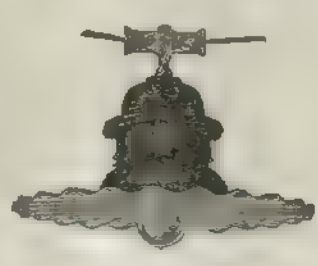
Similar to Style F, with a Cutter High Voltage Insulator between the Adapter and Cable Clamp. Add $1.30 to list prices and 3¼ pounds to shipping weights

STYLE GX—INSULATED CABLE GRIP EXTENSION

Same as Style G, with a Cable Cross-Arm No. 20756. In ordering, use Trade Numbers of Style G Fixtures, with prefix "GX." Add $1.70 to list prices and 5¼ pounds to shipping weights.

*Standard Film Socket furnished in place of Regent, when so ordered

For Factory Shipment Only; F. O. B. South Bend, Indiana



Style F, with 18 in. Radial Bowl Reflector

Style GX, with 24 in. Radial Bowl Reflector and Extension

Style GX, with 20 in. Flat Radial Wave Reflector

CUTTER STREETHOODS, BODIES AND BRACKETS

CUTTER INVERTED CONE STREETHOOD BODIES

Schedule A—Standard Package Quantity, 20 of One Style or Trade Number

Inverted Cone Streethood Bodies are made in two Sizes, with 18 and 22 in. Hoods, respectively, the same Reflector is used with both, the Reflector shape which resembles the Frustrum of an Inverted Cone, is designed to throw the reflected rays out at a distance where they are needed to help the direct rays of the Lamp; the Hood overlaps the Reflector so that most of the light passing above the horizontal is redirected into useful planes. Distribution curves show that the 18 in. size gives splendid results, with 60, 80 and 100 Candle Power Series Lamps and Small Multiple Lamps, the 22 in. size, gives higher efficiency, with the same Lamps and is always recommended for 100 and 250 Candle Power Series Lamps.

Bodies listed are for use with Brackets illustrated below. An Inverted Cone Body consists of a Hood Top, Reflector, Hood Fork, with ¾ in. rigid male Nipple and with or without Socket, according to list. Hood Flanges, for ½ and ¾ in. Pipe, are extra.

The Hoods and Reflectors are made of special deep Drawing Steel and Finished in either high grade Weather-Resisting Baked Paint Enamel or Porcelain Enamel.

The Hood Fork has a Flange near the top which fits directly beneath the upper portion of the Hood, the ¾ in. Nipple is made a rigid part of the Flange, projecting above it for connection to the Cross Arm of Outer-Wired Brackets or to the Hood Flange, which is screwed on the outer end of Inner-Wired Brackets.

18 in. Inverted Cone Streethood Body

Distribution Curve for 80 C. P. Lamp and 18 in. Inverted Cone Streethood Body

22 in. Inverted Cone Streethood Body

22 in. Hood, Reflector and Regent Film Socket, with Hood Fork and ¾ in. Rigid Nipple

With 18 in. Hood; Paint Enamel Finish	Each
No. 21682— Medium Screw Socket; Weight 5½ Lbs.	$1 90
No. 21683— Mogul Screw Socket; Weight 5¾ Lbs.	2 20
No. 21684—*Regent Film Socket; Weight 6 Lbs.	3 20
No. 21685— Without Socket; Weight 4¾ Lbs.	1 40
With 18 in. Hood; Porcelain Enamel Finish	**Each**
No. 21686— Medium Screw Socket; Weight 6⅜ Lbs.	$4 40
No. 21687 Mogul Screw Socket, Weight 7 Lbs.	4 70
No. 21688—*Regent Film Socket Weight 7¾ Lbs.	4 70
No. 21689— Without Socket; Weight 6½ Lbs.	2.90

With 22 in. Hood; Paint Enamel Finish	Each
No. 21690— Medium Screw Socket; Weight 7¾ Lbs.	$2.50
No. 21691— Mogul Screw Socket; Weight 8 Lbs.	2.80
No. 21692—*Regent Film Socket; Weight 8¼ Lbs.	3.80
No. 21693— Without Socket; Weight 7 Lbs.	2.00
With 22 in. Hood; Porcelain Enamel Finish	**Each**
No. 21694— Medium Screw Socket; Weight 9¾ Lbs.	$4 20
No. 21695 Mogul Screw Socket Weight 10 Lbs.	4 50
No. 21696 *Regent Film Socket Weight 10¼ Lbs.	5 50
No. 21697— Without Socket; Weight 9 Lbs.	3.70

BRACKETS

LOOPED HOOD

Consists of an Inverted Cone Streethood Body, with Looped Cross-Arm

Add 50 cents to list prices of Bodies given above, and 3 Lbs. to shipping weights

WALL BRACKET

Has a 4 ft. Gooseneck of ½ in. Pipe so the Pipe can extend 1 ft. inside the Flange and hold the Lamp 3 ft. from the Wall.

Each

No. 21947—With Wall Flange and ½x¾ in. Hood Flange; Weight 6¼ Lbs. $1.10

INNER-WIRED BRACKETS

Consists of a 3 ft. Gooseneck of ½ in. Pipe, ½x¾ in. Hood Flange, and Grooved Pole Plate.

Each

No. 21941—With Brace Arm; Weight 8½ Lbs. $1 50

No. 21942 Without Brace Arm; Weight 5½ Lbs. .95

URBAN BRACKETS

The Spreader on the end of the Gooseneck has a Fiber Insulator to separate it from the Streethood proper, thus reducing the risk of leakage on circuits up to 600 Volts; Furnished with 3 ft. Gooseneck of ½ in. Pipe; Prices do not include Streethood Bodies.

Each

No. 21935—With Brace Arm; Weight 11 Lbs. $2 25

No. 21936—Without Brace Arm Weight 8 Lbs. 1.70

SPARTAN JUNIOR BRACKET

A Single Bend Bracket of ½ in. Pipe which holds the Lamp 3 ft. from the Pole; Designed for either Inner or Outer Wiring.*

Each

No. 21945 —With Hood Flange; Weight 13¼ Lbs. $2.45

No. 21946* —Without Hood Flange; Weight 12 Lbs. 2.30

CABLE GRIP SUSPENSION STREETHOOD

A Center Span Fixture, with a Cross-Arm, Insulator and Cable Clamp supporting Inverted Cone Streethood Bodies.

Add $2 10 to list prices of Bodies given above and 8½ Lbs. to shipping weights

STANDARD BRACKETS

Has a 3 ft. Gooseneck of ½ in. Pipe, Pole Plate and Enameled Wood Cross-Arm, with Metal Bound Ends; the Brace Arm shown on the back of the Pole is used to guide the line wires to the Cross-Arm. This method of wiring holds the Fixture steady in stormy weather.

Each

No. 21923—With Brace Arm; Weight 10 Lbs. $1.75

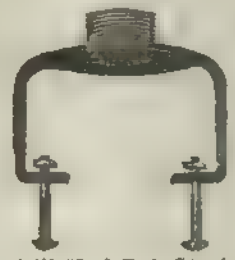
No. 21924—Without Brace Arm; Weight 7 Lbs. 1.20

CUTTER STREETHOOD SOCKETS

For Street Series and Multiple Lamps

Schedule A

Medium Screw Base Lamp Grip Socket



No. 21713 Hood Fork Complete

LAMP GRIP MULTIPLE SOCKETS

The Cutter Lamp Grip Sockets are equipped with two Vertical Springs which engage the threads of the Lamp Collar, re-inforce the Socket Shells and relieve the tension; These Vertical Springs grip the Lamp Base and prevent the Lamp from working loose when subjected to vibration and the contraction and expansion caused by the variations in temperature; the use of these Sockets will greatly reduce Lamp breakage.

	Each
No. 21400—Medium Screw Base; Weight ⅞ Lb. Each	$0 50
200 in a Standard Package	
No. 21402—Mogul Screw Base; Weight 1¼ Lbs. Each	.80
150 in a Standard Package	

HOOD FORKS AND FLANGES

With Screws and Nuts for fastening Sockets in Cutter Inverted Cone Streethood Bodies

	Each
No. 21713—Hood Fork, with ¾ in. Rigid Male Nipple; Weight ⅝ Lb. Each	$0.20
No. 21484—Hood Fork, with ¾ in. Female Thread, Weight ⅓ Lb. Each	.20
No. 21485—Hood Fork, with ⅜ in. Female Thread; Weight ⅓ Lb. Each	.20
No. 21486—Low Flange, with ⅜ in. Female Thread; Weight ⅓ Lb. Each	.20
100 in a Standard Package	

PARTS FOR CUTTER BRACKETS

⅛ in. Pole Plate

⅛ in. Grooved Pole Plate

⅛ in. Grooved Pole Plate

¾ in. Wall Flange

Corner Plate

Hood Insulator

CURVED POLE PLATES

	Each
No. 20512—For ⅛ in. Pipe; Weight 1 Lb. Each	$0.20
500 in a Standard Package	
No. 21487—Grooved, for ⅛ in. Pipe; Weight 1¼ Lbs. Each	.30
No. 21438—Grooved, for ¼ in. Pipe; Weight 2¼ Lbs. Each	.40
400 in a Standard Package	

WALL FLANGES

	Each
No. 21488—Threaded, for ⅛ in. Pipe; Weight 1 Lb. Each.	$0 20
No. 21489—To Slip over ⅛ in. Pipe; Weight 1 Lb. Each	.30
500 in a Standard Package	
No. 21490—Threaded, for ¼ in. Pipe; Weight 2 Lbs. Each	30
No. 21491—To Slip over ¼ in. Pipe; Weight 2 Lbs. Each	40
400 in a Standard Package	

CORNER PLATES

	Each
No. 21492 For ⅛ in. Pipe, Weight 2½ Lbs Each.	$0 70
300 in a Standard Package	
No. 21493—For ¼ in. Pipe; Weight 2½ Lbs. Each	.70
200 in a Standard Package	

HOOD INSULATORS

With Pipe Cap above, ½ in. Stud below; Used on High Voltage and Eastern Brackets

	Each
No. 21494—With ⅛ in. Pipe Cap; Weight 3 Lbs. Each	$0 90
No. 21495—With ¼ in. Pipe Cap; Weight 3 Lbs. Each	.90
100 in a Standard Package	

Regent Receptacle and Mogul Base Socket, with Film Holder

Standard Film Receptacle and Mogul Base Socket

CUTTER REGENT FILM SOCKETS

The Film Socket is the vital part of the Regulating Mechanism of a Series Lighting System, and it must constantly perform its function reliably and accurately; When one Lamp in a circuit burns out, the Dielectric Film must puncture, allowing the circuit to re-establish itself instantly; Otherwise, the remaining Lamps in the circuit will cease to burn.

The Film Cut-Out used in the Regent Film Socket punctures uniformly and accurately at rated voltage; It is enclosed in the Socket and protected against climatic conditions; It cannot creep or fall out as a result of the vibration of the Fixture and Lamp in service.

The Regent Film Socket is only 3½ in. over-all, and due to the fact that all contact and live parts are covered by the Porcelain, the Socket can be mounted in a very small space; the distance between Supporting Screws and nearest live Terminal is 1½ in.; **There are no live metal parts exposed back of the Socket; Corrosion and danger of short circuits are eliminated.**

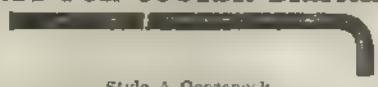
	Each
No. 21466—Receptacle, Mogul Base Socket and Film Holder; Weight 1½ Lbs. Each	$1.80
50 in a Standard Package	
No. 21462—Lamp Socket Only, with Film Holder; Weight ⅛ Lb. Each	40
50 in a Standard Package	
No. 21463—Package of 50 Silk Films	.75
500 Films in a Standard Package	

STANDARD FILM SOCKETS

Have a Porcelain Receptacle, with Wire Terminals and Spring Clips to hold the projecting fingers of the Socket part; These fingers hold the Dielectric Film; the Receptacle fits in the Porcelain Housing of Cutter Radial Streethood Bodies listed on pages 483 and 484; Screws and Nuts for holding the Receptacle in place are included with the Streethood Bodies and with the Hood Forks furnished with Inverted Cone Streethood Bodies.

	Each
No. 21462—Receptacle and Socket, Mogul Screw Base; Weight 1¼ Lbs. Each	$1.80
50 in a Standard Package	
No. 21434—Receptacle Only; Weight ⅛ Lb. Each	.80
100 in a Standard Package	
No. 20480—Socket Part Only, Mogul Screw Base Weight ⅝ Lb. Each	1.00
75 in a Standard Package	Per Package
No. 21451—Package of 15 Films	$0 15

PARTS FOR CUTTER BRACKETS



Style A Gooseneck

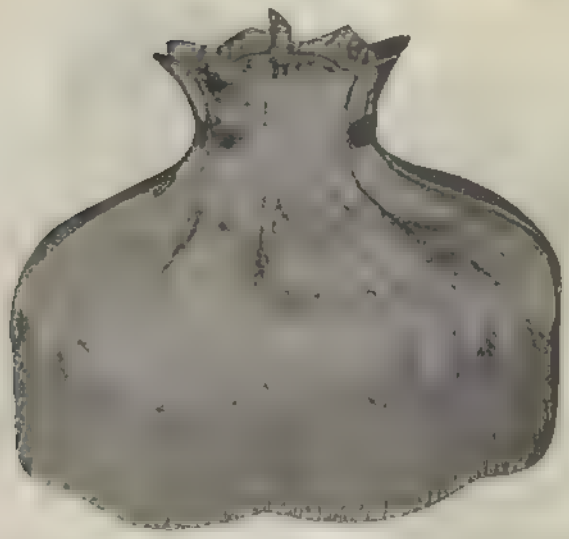
Style B Gooseneck

GOOSENECKS

Style A	Style B	Length, Ft.	Size Pipe, In.	Stand. Pkg.	Wt., Lbs. Each	Each
No. 21362	No. 21365	3	⅛	200	2⅞	$0.60
No. 21363	No. 21366	4	⅛	150	3⅞	.65
No. 21364	No. 21367	5	⅛	125	4⅞	.80
No. 21439	No. 21442	3	¼	150	3¾	.75
No. 21440	No. 21443	4	¼	125	4¾	.90
No. 21441	No. 21444	5	¼	100	5¾	1.15

For Factory Shipment Only; F. O. B. South Bend, Indiana

ELECTRIC LIGHT DOMES AND SHADES



	Each
No. 1038—Electric Light 8 Panel Dome; Diameter 22 in.; Assorted Colors	$12.00
Weight About 12 Lbs. Each	
No. 511—Electric Light 10 Panel Dome; Diameter 24 in.; Open Filigree Frame Work, with Fancy Imported Fringe	20.00
Weight About 14 Lbs. Each	

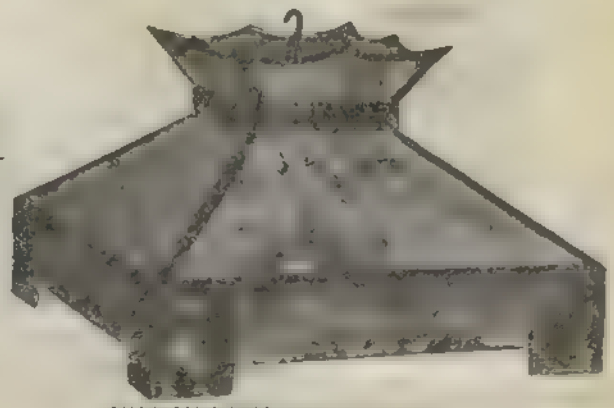
FOR PORTABLE LAMPS

10 in. Fitter at Base to Set on a 10 in. Tripod; Height 6 in., Diam. 11 in.

	Each
No. 8023G —Green	$2.50
No. 8023R —Royal Copper	4.00
No. 8023CC—Cased Caledone	2.50
Weight 2 Lbs. Each	

12 in. Dome; Height 6 in.; Takes 4 in. Holder

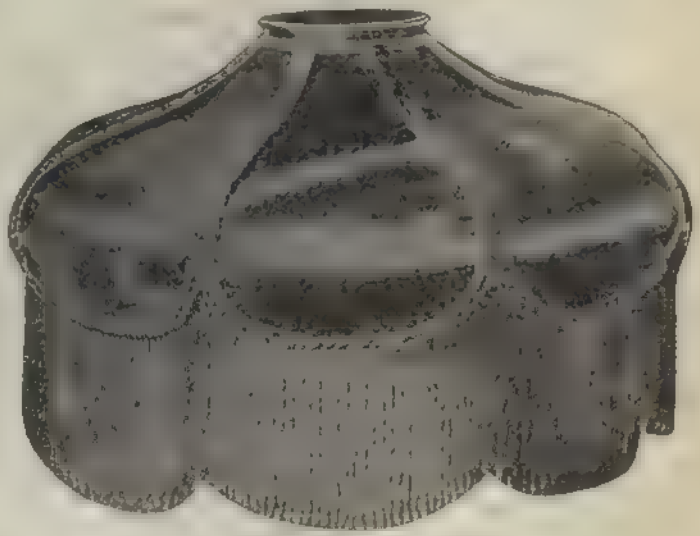
	Each
No. 8054G—Green Cased Dome; 5 in. Green Fringe	$4.20
No. 8054C—Royal Copper Cased; 5 in. Red Fringe	5.50
No. 8000 Frosted Glass, Without Fringe, Otherwise same as above	1.60
Weight 2 Lbs. Each	



MISSION DESIGN ELECTRIC SHADES

Assorted Colors

	Each
No. 1873-16—16 in. Square at Base	$ 9.00
Weight About 8 Lbs. Each	
No. 1873-18—18 in. Square at Base	10.00
Weight About 10 Lbs. Each	



ELECTRIC LIGHT DOME

Amber, Green and Amber and Green Panels
4 in. Fitter

	Each
No. 287-14—Diameter 14 in.	$ 8.00
Weight 6 Lbs. Each	
No. 287-18—Diameter 18 in.	10.00
Weight 8 Lbs. Each	
Four in a Case	

INVERTED GAS OR ELECTRIC SHADES

For 3¼ in. Shade Holder; Diameter 6 in.; 4 in. Fringe

	Each
No. 425R—Ruby Color	$1.60
No. 425G—Green Color	1.45
No. 425O—Orange Color	1.45
No. 425F—Floral Design	1.60
Weight 1½ Lbs. Each	

ELECTRIC SHADES

CUT STAR LANTERN

Per Dozen

No. 11041—4 in. Square at Base; Height 7 in.; 3¼ in. Holder; Plain White Color, Use 25, 40 or 60 Watt Mazda Lamps $26.40

Weight 18 Lbs. per Dozen

LAUREL WREATH SHADES

Bell Shaped. 7 in. Diameter at Base. Height 5 in.; 2¼ in. Holder.

Per Dozen

No. 11113½—Brown and White . . .$30.00
No. 11105½—White 15.00

Weight 14 Lbs. per Dozen

SQUARE LANTERN

4¾ in. Square at Base; Height 7⅛ in.; 2¼ in. Shade Holder; Use 25, 40 or 60 Watt Mazda Lamp.

Per Dozen

No. 11110½B —Brown $30.00
No. 11110½G —Green 30.00
No. 11110½W—White 21.00

Weight 30 Lbs. per Dozen

ALABASTER ELECTRIC SHADES

SHADES

Per Dozen

No. 1909—Plain White Alabaster; Grecian Design; Height 5 in.; Round Base; 4 in. Diam.; Same Design as Semi Indirect Bowl, listed below; Use 25, 40 or 60 Watt Lamps $7.50

Five Dozen in a Standard Package
Weight 7 Lbs. per Dozen

SHADES

Per Dozen

No. 1911—Plain White Alabaster; Grecian Design; Height 5 in.; Round Base, 4 in. Diam.; Same Design as Semi Indirect Bowl, listed below; Use 25, 40 or 60 Watt Lamps $7.50

Five Dozen in a Standard Package
Weight 7 Lbs. per Dozen

SHADES

Per Dozen

No. 1913—Plain White Alabaster; Grecian Design; Height 5 in.; Round Base, 4 in. Diam.; Same Design as Semi Indirect Bowl listed below; Use 25, 40 or 60 Watt Lamps $7.50

Five Dozen in a Standard Package
Weight 7 Lbs. per Dozen

ALABASTER SEMI-INDIRECT BOWLS

For Semi Indirect Lighting

SEMI-INDIRECT BOWL

Each

No. 1908—White Alabaster; 14 in. Fitter; Height 6 in.; Use three or four, 40 or 60 Watt Mazda Lamps; Suspended from Ceiling on Chain Fixture and 14 in. Ring, which are Furnished Seperate $6.00

Four Only in a Standard Package
Weight 4½ Lbs. Each

SEMI-INDIRECT BOWL

Each

No. 1910—White Alabaster; 14 in. Fitter; Height 6 in.; Use three or four, 40 or 60 Watt Mazda Lamps; Suspended from Ceiling on Chain Fixture and 14 in. Ring, which are Furnished Separate $6.00

Four Only in a Standard Package
Weight 4½ Lbs. Each

SEMI-INDIRECT BOWL

Each

No. 1912—White Alabaster; 14 in. Fitter; Height 6 in.; Use three or four, 40 or 60 Watt Mazda Lamps; Suspended from Ceiling on Chain Fixture and 14 in. Ring, which are Furnished Separate $6.00

Four Only in a Standard Package
Weight 4½ Lbs. Each

GAS AND ELECTRIC LIGHT SHADES

ELECTRIC

Per Dozen

No. 230C—Clear Glass Design Pebbled Glass Background. Diameter 5 in., Height 4 in.; 2¼ in. Fitter $2.00

Twelve Dozen in a Package

Weight 8 Lbs. per Dozen

ELECTRIC

No. 433A—Pebbled Glass; Clear Stars, Wavy Crimped Edge; 5 in. Diameter, 4 in. High Takes 2¼ in. Holder .. $2.00

Twelve Dozen in a Package

Weight 8 Lbs. per Dozen

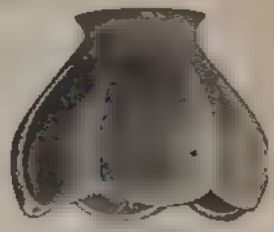
ELECTRIC

Per Dozen

No. 433B—Pebbled Glass, Crimped Edge, 5⅛ in. Diam. 4½ in High; Takes 2¼ in. Holder $2.00

Twelve Dozen in a Package

Weight 8 Lbs. per Dozen



ELECTRIC

Diameter 4⅝ in., Height 3¾ in.; For 2¼ in. Holder

Per Dozen

No. 433C—Flint Opalescent..$3.50

No. 433D—C. R. I. 3.50

No. 455E Straw 3.50

Twelve Dozen in a Package

Weight 8 Lbs. per Dozen

Per Dozen

No. 4102B—Roughed Background, Clear Lines have the effect of Cut Design; 25 Watt; Diameter 5 in., Height 4¼ in; For 2¼ in. Holder..$3.75

Eight Dozen in a Package

Weight 12 Lbs. per Dozen

Per Dozen

No. 4045E—Roughed Background, Clear Lines have the effect of Cut Design; 25 Watt; Diameter at Base 4 in.; Height 5 in.; For 2¼ in. Holder $3.25

No. 4046E—For 40 Watt Mazda Lamp; Diameter 4⅛ in., Height 6 in.; For 2¼ in. Holder $4.25

Eight Dozen in a Package

Weight 12 Lbs. per Dozen

Per Dozen

No. 4164—Roughed Background, Clear Lines have the effect of Cut Design; 25 Watt; Diameter 4¼ in., Height 4¼ in.; For 2¼ in. Holder..$3.75

Eight Dozen in a Package

Weight 12 Lbs. per Dozen

ELECTRIC

Per Dozen

No. 1345F—White Acid Glass; Scalloped Edge; 5 in. Diameter, 4 in. High, Takes 2¼ in. Shade Holder; For 25 or 40 Watt Mazda Lamp.....$5.00

Six Dozen in a Package

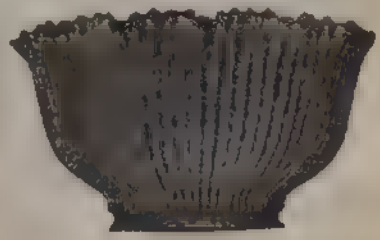
Weight 10 Lbs. per Dozen

Per Dozen

No. 1345G—White Acid Glass; Scalloped Edge; 8 in. Diam., 4 in. High; Takes 4 in. Shade Holder.....$7.00

Three Dozen in a Package

Weight 12 Lbs. per Dozen



GAS SHADE

Per Dozen

No. 431A—Diameter 7⅛ in., Height 4 in.; For 4 in. Holder.....$5.00

No. 4060C—For use with Inverted Gas; Diameter 7 in.; Width 4¼ in.; For 3⅜ in. Holder; Top is reinforced with a Metal Ring 3.00

Four Dozen in a Package

Weight 12 Lbs. per Dozen

CANDLES AND BOBECHES

ROUND CANDLE

ROUND BOBECHE

Per Dozen

No. 25—Round Bobeche; Opal Glass; Diameter 3¼ in.; 1 in. Hole.....$0.70

Weight about 1 Lb. per Dozen

ROUND CANDLE

Per Dozen

No. 743—Round Candle; Opal Glass; Size ⅞x4 in.... .....$0.75

Weight about 1¼ Lbs. Per Dozen

SQUARE BOBECHES Per Dozen

No. 17—Fits No. 225 Candle; Opal Glass. 4⅝ in. Square, 1⅛ in. Square Hole.$0.85

No. 18—Fits No. 224 Candle; Opal Glass; 3⅛ in. Square, 1 in. Square Hole.. .85

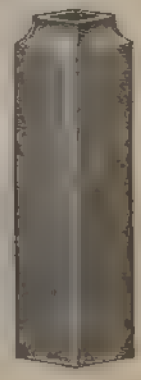
SQUARE CANDLES

Per Dozen

No. 225—Size 1x4 in.; Opal Glass.. ...$0.85

No. 224—Size ⅞x4 in.; Opal Glass .. 85

Weight about 1½ Lbs. per Dozen



SQUARE CANDLE

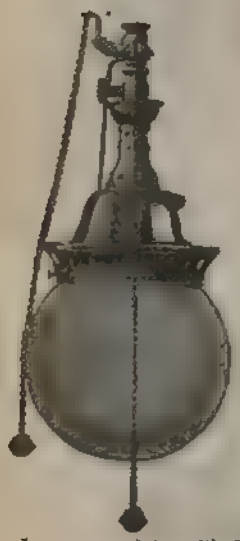
WELSBACH, REFLEX INVERTED GAS LAMPS

This Lamp gives about five times the light of a 16 candle power Electric Lamp. Being an inverted Lamp, there is no shadow directly under the light. It is made up of a Burner, and Mantle inside of a glass draught and protector Cylinder, further protected by a 5 in. ground glass Globe, or Fancy Shade.

The amount of gas consumed can be regulated by an Adjusting Screw at the base of the Burner.

The Lamp may also be had with a By-pass, which will reduce the brilliant light to a very dim one, or vice versa, by means of Chains.

Each Lamp is furnished with a Goose Neck and Extension Connection, for fitting to arm of Chandelier.



Lamp complete with By-pass and Chains

LAMP COMPLETE WITH BY-PASS AND CHAINS

	*Each
No. 244-BB—Brushed Brass Finish	$4.20
No. 244-OC—Oxidized Copper Finish	4.60

WITHOUT BY-PASS AND CHAINS

No. 245 BB—Brushed Brass Finish	3.50
No. 245-OC—Oxidized Copper Finish	3.50

Weight 1⅝ Lbs. Each

WITHOUT OUTER GLOBE OR BY-PASS AND CHAINS

No. 713-BB—Brushed Brass Finish	3.10
No. 713-OC—Oxidized Copper Finish	3.40

Weight 1¼ Lbs. Each

Lamp without Outer Globe or By-pass and Chains

Outer Globe only

Cylinder or Inner Globe

OUTER GLOBES ONLY

3⅜ in. Fitter

	Each
No. 436A—5 in. Crystal Glass Globe, Roughed Inside	$0.25
No. 436B—5 in. Half Frosted Globe	.25

INNER GLOBES

	Each
No. 317—Cylinder or Inner Globe	$0.25

BY-PASS

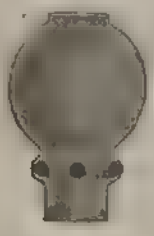
For reducing to a dim light

	*Each
No. 6-BB—By-pass and Chains; Brushed Brass Finish	$1.00
No. 6-OC—By-pass and Chains, Oxidized Copper Finish	1.20

AIR-HOLE GAS CHIMMEYS

For Use with Gas or Gasoline Mantles

The Nocrac Ware is used on three fourths of the electric arc lamps and is made to resist intense heat and its variations, common to gas lighting. The Opal Swelled Chimneys give a soft, pleasant glow, the whiteness of whose light is very beneficial to eyesight. The Clear Glass Chimneys are for wider area and are ordinarily used with a top Shade. Nocrac Chimneys Beat the Dutch (imported) and do not crack and break the mantles



OPAL GLASS

	Per Case
No. 575—(Q) 6⅝ in. High, 4½ in. Diameter at Bulge; For 2 in. Fitter	$12.80

Can furnish above in Clear Glass on Special Order

CLEAR GLASS

	Per Case
No. 570—8 in. High, 2⅓ in. Widest Diameter; For 2 in. Fitter	$10.00

Can furnish above in Opal Glass on Special Order

CLEAR GLASS

	Per Case
No. 565—7⅞ in High, 2⅝ in. Widest Diameter, For 2 in. Fitter	$9.30

Six Dozen in a Case; Each Chimney in Separate Carton, greatly reducing Breakage

GUNN SANITARY DESKS

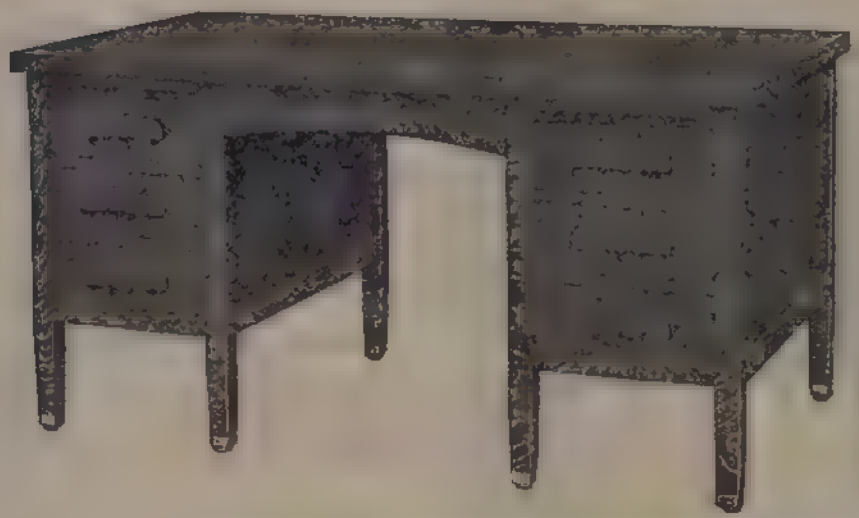
ROLL TOP

Writing Bed and Deck Top Five Ply, Built-Up Stock, 1⅛ in. Thick, Heavy Deck Arms, Built-Up End and Back Panels, Dull Finish; Curtain equipped with Pasquil End Lock; Pigeon Hole Interior has File Drawers, Card Index Drawer, Private Compartment with Flat Keyed Lock, Wood Scoop Pigeon Hole Boxes; Drawers in Pedestals are made of Hardwood, Dove-Tailed Front and Back with Three Ply Drawer Bottoms, Framed in; Vertical Letter File in lower right hand Pedestal Drawer; Metal Dust and Mouse Proof Bottoms on Pedestals; Center Drawer in Knee Space has Flat Keyed Lock; Legs fitted with Brass Ferrules and Slides; the Imitation Mahogany Desk has Mahogany Writing Bed, Deck Top and Panels.

Length 60 in., Height 43 in., Depth 34 in.

No. 460RO—Quartered Oak	$78 00
No. 460RB—Birch, Imitation Mahogany	82.00
No. 460RM—Genuine Mahogany	104 00

Weight 350 Lbs. Each



SINGLE, FLAT TOP

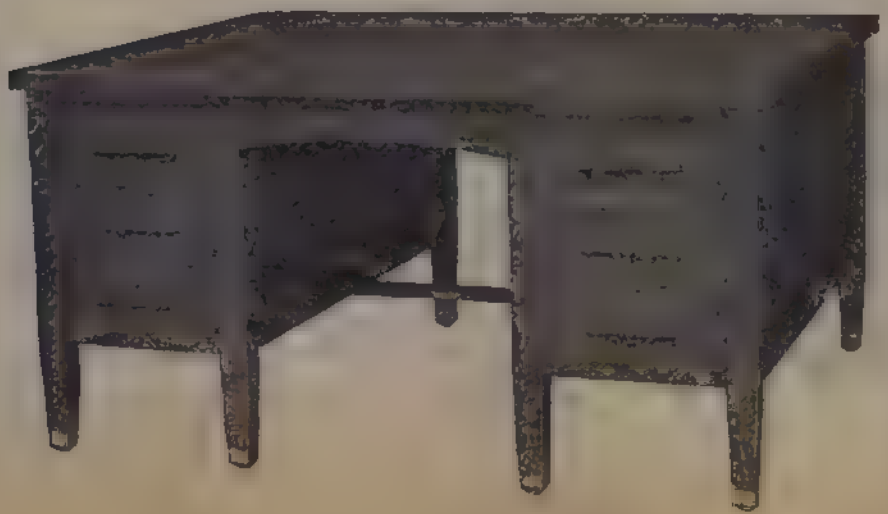
Writing Bed Five Ply Build-Up Stock, 1⅛ in. Thick; Built-Up End and Back Panels, Dull Finish; Drawers in Pedestals are made of Hardwood, Dove-Tailed Front and Back, with Three Ply Drawer Bottoms, Framed in; Vertical Letter File in lower right hand Pedestal Drawer; Metal Dust and Mouse Proof Bottoms on Pedestals; Center Drawer in Knee Space has Flat Keyed Lock; Legs fitted with Brass Ferrules and Slides

The Imitation Mahogany Desk has Mahogany Writing Bed and Panels.

Length 60 in., Height 31 in., Depth 34 in.

No. 460SO—Quartered Oak	$46 00
No. 460SB—Birch, Imitation Mahogany	60 00
No. 460SM—Genuine Mahogany	82 00

Weight 220 Lbs. Each



DOUBLE FLAT TOP

Both Sides Built Alike

Writing Bed Five Ply Built-Up Stock, 1⅛ in. Thick; Built-Up End and Back Panels, Dull Finish; Drawers in Pedestals are made of Hardwood, Dove-Tailed Front and Back, with Three Ply Drawer Bottoms, Framed in; Vertical Letter File in lower right hand Pedestal Drawer; Metal Dust and Mouse Proof Bottoms on Pedestals; Center Drawer in Knee Space has Flat Keyed Lock; Legs fitted with Brass Ferrules and Slides.

The Imitation Mahogany Desk has Mahogany Writing Bed and Panels.

All, 31 in. High

No. 460DO—Quartered Oak; Length 60 in., Depth 50 in.; Weight 350 Lbs	$ 78 00
No. 460DM—Genuine Mahogany. Otherwise same as above.	104 00
No. 466DO—Quartered Oak; Length 66 in., Depth 54 in.; Weight 400 Lbs.	90.00
No. 466DM—Genuine Mahogany, Otherwise same as above.	120.00
No. 472DO—Quartered Oak; Length 72 in., Depth 60 in.; Weight 420 Lbs.	104.00
No. 472DM—Genuine Mahogany, otherwise same as above.	140 00

GUNN SANITARY DESKS

ROLL TOP

Writing Bed and Deck Top Five Ply, Built-Up Stock, 1⅛ in. Thick; Heavy Deck Arms, Dull Finish; Built-Up End and Back Panels; Curtain equipped with Pasquil End Lock; Pigeon Hole Interior has File Drawers, Private Compartment with Flat Keyed Lock, Wood Scoop Pigeon Hole Boxes; Drawers in Pedestals are made of Hardwood, Dove-Tailed Front and Back, with Three Ply Drawer Bottoms, Framed in; Metal Dust and Mouse Proof Bottoms on Pedestals; Center Drawer in Knee Space has Flat Keyed Lock; Legs fitted with Brass Ferrules and Slides; the Imitation Mahogany Desk has Mahogany Writing Bed Deck Top and Panels; Deck Arms faced with Mahogany

Length 54 in., Height 43 in., Depth 32 in.

	Each
No. 354RO—Quartered Oak	$57.00
No. 354RB—Birch, Imitation Mahogany	61.00

Weight 225 Lbs. Each

SINGLE, FLAT TOP

Writing Bed Five Ply Built-Up Stock, 1⅛ in. Thick, Built-Up End and Back Panels, Dull Finish; Drawers in Pedestals made of Hardwood, Dove-Tailed Front and Back, with Three Ply Drawer Bottoms, Framed in; Metal Dust and Mouse Proof Bottoms on Pedestals; Center Drawer in Knee Space has Flat Keyed Lock and Automatically Locks Pedestal Drawers when closed; Legs fitted with Brass Ferrules and Slides; the Imitation Mahogany Desk has Mahogany Writing Bed and Panels

Length 54 in., Height 31 in., Depth 32 in.

	Each
No. 354SO—Quartered Oak	$34 00
No. 354SB—Birch, Imitation Mahogany	36 00

Weight 180 Lbs. Each

SINGLE, FLAT TOP

Writing Bed Five Ply Built-Up Stock, 1⅛ in. Thick, Built-Up End and Back Panels, Dull Finish; Drawers in Pedestals made of Hardwood, Dove-Tailed Front and Back, with Three Ply Drawer Bottoms, Framed in; Metal Dust and Mouse Proof Bottoms on Pedestals; Center Drawer in Knee Space has Flat Keyed Lock and Automatically Locks Pedestal Drawers when closed; Legs fitted with Brass Ferrules and Slides; the Imitation Mahogany Desk has Mahogany Writing Bed and Panels.

Length 50 in., Height 31 in., Depth 32 in.

	Each
No. 350SO—Quartered Oak	$32 00
No. 350SB—Birch, Imitation Mahogany	36 00

Weight 175 Lbs. Each

GUNN SANITARY DESKS

ROLL TOP

Plain Oak, Gloss Finish

Solid Plain Oak Writing Bed, Deck Top and Drawer Fronts; Heavy Deck Arms; Built-Up End and Back Panels; Pigeon Hole Interior has File Drawers and Scoop Pigeon Hole Boxes; Drawers in Pedestals made of Hardwood, Dove-Tailed Front and Back; Metal Dust and Mouse Proof Bottoms on Pedestals; Center Drawer in Knee Space has Flat Keyed Lock; Legs fitted with Slides.

Each

No. 150R—Plain Oak, Gloss Finish. Length 50 in., Height 43 in., Depth 30 in $44.00

Weight 200 Lbs. Each

SINGLE, FLAT TOP

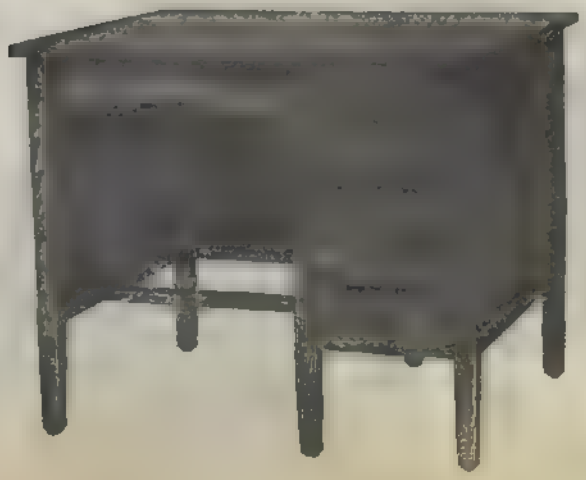
Plain Oak, Gloss Finish

Solid Plain Oak Writing Bed and Drawer Fronts; Built-Up Plain Oak End and Back Panels; Drawers in Pedestals made of Hardwood, Dove-Tailed Front and Back; Metal Dust and Mouse-Proof Bottoms on Pedestals; Center Drawer in Knee Space has Flat Keyed Lock and Automatically Locks Pedestal Drawers when closed; Legs fitted with Slides.

Each

No. 150S—Plain Oak, Gloss Finish; Length 50 in., Height 31 in., Depth 30 in..... $25.00

Weight 160 Lbs Each



SINGLE, FLAT TOP

Plain Oak, Gloss Finish

Solid Plain Oak Writing Bed and Drawer Fronts; Built-Up Plain Oak End and Back Panels; Three Drawers in Pedestal made of Hardwood, Dove-Tailed Front and Back; Metal Dust and Mouse Proof Bottom on Pedestal; Center Drawer in Knee Space has Flat Keyed Lock and Automatically Locks Pedestal Drawers when closed; Legs fitted with Slides.

Each

No. 138S—Plain Oak, Gloss Finish; Length 38 in., Height 31 in., Depth 30 in..... $20 00

Weight 120 Lbs. Each

GUNN SANITARY DESKS

Five Ply Built-Up Writing Bed and Built-Up Panels, Dull Finish; Pedestal has Three Drawers made of Hardwood, Dove-Tailed Front and Back with Three Ply Drawer Bottoms, Framed in; Metal Dust and Mouse Proof Bottom on Pedestal; Legs fitted with Brass Ferrules and Slides.

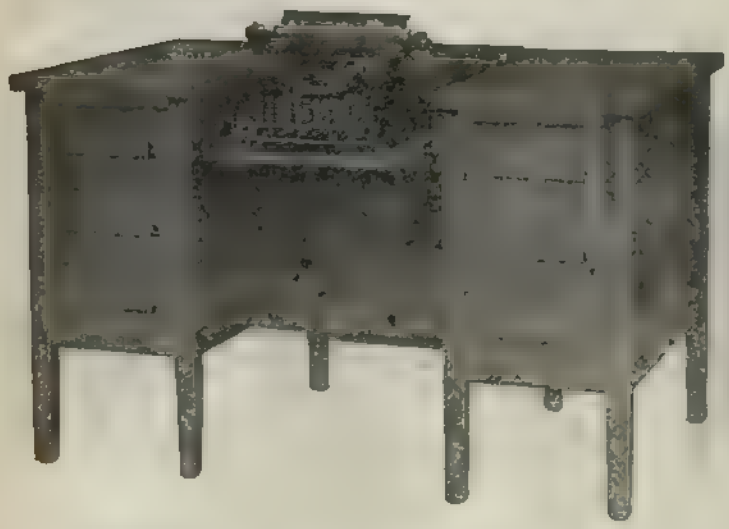
The Imitation Mahogany Desk has Mahogany Writing Bed and Panels.

Typewriter machine is securely fastened to Sliding Table, and when not in use is tipped back and Writing Bed comes into place; Opening between Pedestals will accommodate machine with carriage not exceeding 18⅛ in.

Length 38 in., Height 31 in., Depth 32 in.

No. 338FTO—Quartered Oak $35.00
No. 338FTB—Birch, Imitation Mahogany ...

Weight 140 Lbs. Each



Five Ply Built-Up Writing Bed and Built-Up Panels, Dull Finish; Both Pedestals have Three Drawers each, made of Hardwood, Dove-Tailed Front and Back, with Three Ply Drawer Bottoms, Framed in; Metal Dust and Mouse Proof Bottoms on Pedestals; Legs fitted with Brass Ferrules and Slides.

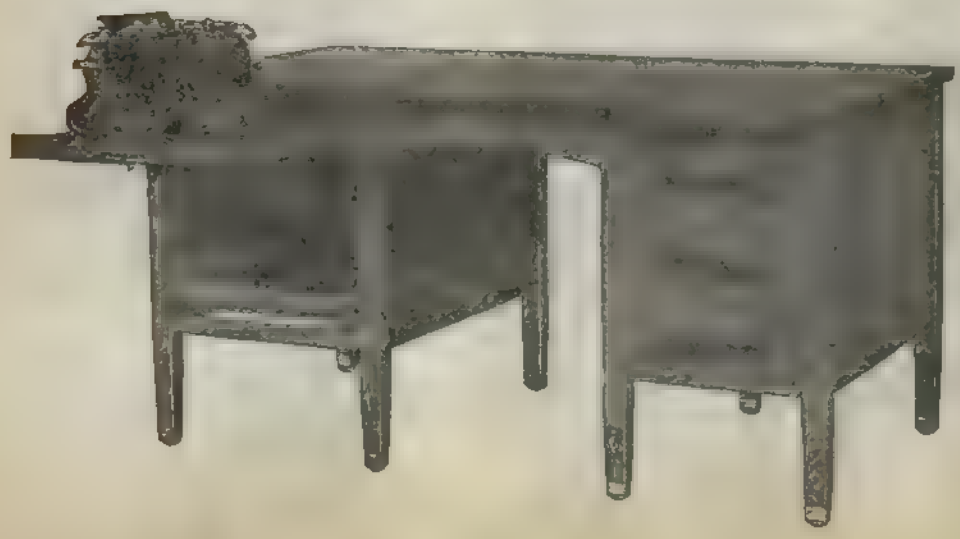
The Imitation Mahogany Desk has Mahogany Writing Bed and Panels.

Typewriter machine is securely fastened to Sliding Table, and when not in use is tipped back and Writing Bed comes into place; Opening between Pedestals will accommodate machine with carriage not exceeding 18⅛ in.

Length 50 in., Height 31 in., Depth 32 in.

	Each
No. 350FTO—Quartered Oak	$43.00
No. 350FTB—Birch, Imitation Mahogany	47.00

Weight 210 Lbs. Each



Five Ply Built-Up Plain Oak Writing Bed, 1¼ in. Thick; Solid Plain Oak Drawer Fronts; Built-Up Plain Oak End and Back Panels; Three Drawers in right hand Pedestal made of Hardwood, Dove-Tailed Front and Back; Metal Dust and Mouse Proof Bottoms on Pedestals. Center Drawer in Knee Space has Flat Keyed Lock; Legs fitted with Brass Ferrules and Slides.

Length 60 in., Height 31 in., Depth 34 in.

	Each
No. 260FTP—Plain Oak, Dull Finish; Complete with Typewriter Pedestal	$68.00

Weight 235 Lbs. Each

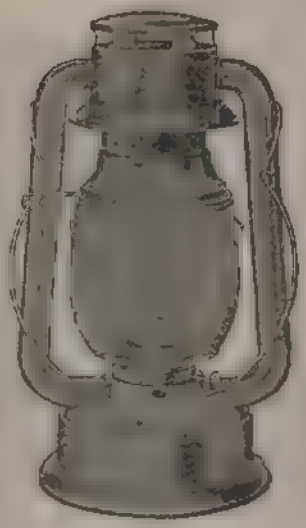
MARSWELLS TUBULAR LANTERNS

Regular Fount has 35 Hours' Oil Capacity; flanged and recessed at the bottom so it will not slide on slippery surface and broad so it will not tip or blow over.

Brass Burner—The only Brass Burner Cold Blast Lantern now being made, that we can learn about. Our standard Brass Burners carried in open stock will fit Old and New Marswells Lanterns.

Brass Burners are furnished by all makers in high grade Railway Lamps, Conductor Lanterns, House Lamps, etc., but they are cutting down costs by using tin burners on all other lanterns but Marswells.

One inch Wick, Short Globe 4½ in. high, interchangeable with all other Short Globes.



No Springs are needed in the Marswells; swing the Lever above the Globe from left to right, to lift the hood into the dome.

Tip back the globe, clear of the burner, so that the globe may be polished, the wick trimmed of char or dust, and lighted.

Nothing sticks, nothing jars—you do not have to hug the lantern while releasing some spring levers as in other styles.

The hood travels smoothly upward in a spiral slot.

After insuring its capacity for giving light—we guarantee it will hold that light in the most violent storms, gusts of wind around the corner, etc. You can safely match the Marswells against any other make.

Fill each lantern in the test with an equal amount of oil, trim the wicks uniformly, then notice how much higher the Marswells flame rises (better burner, better combustion).

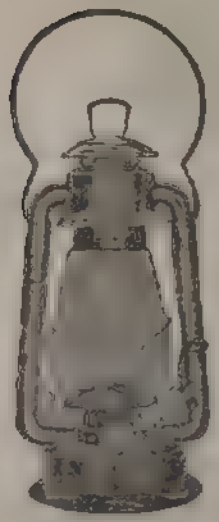
SHORT GLOBE, COLD BLAST

No. 2 Brass Burner, 1 in. Wick; 13½ in. High

	Per Dozen
No. 120 —Tin Fount; Capacity 1¾ Pints; Burns 35 Hours	$16.50
No. 120BF—Brass Fount; Capacity 1¾ Pints; Burns 35 Hours	22.00
No. 120CF—Copper Fount; Capacity 1¾ Pints; Burns 35 Hours	22.00

Half Dozen in a Case; Average Weight 50 Lbs. per Dozen

MARSWELLS



Made of Extra Heavy Material, with Best Workmanship and Fine Finish

The Reinforced Top Rim prevents Lantern from being broken or twisted out of shape.

The Extra Inside Cage which carries the Spring that operates the Raising and Lowering Device prevents the Spring, if broken, from breaking through.

The Extra Offset upon which the Burner Locks and which reinforces the Tubes, prevents them from being bent out of shape and resists the rocking back and forth of the Tubes from the Main Body of the Lantern.

The Large Fount is oval on the Top and Concave on the Bottom, preventing the Lantern's going out when jarred roughly.

The Large Filler enables the user to fill the Lantern without removing his gloves in cold weather.

The Lock Burner is made of Heavy Brass and is perfect fitting. The Air Holes are arranged to regulate the flame so that there can be no smutting of the Globe.

MARSWELLS COLD BLAST

	Per Dozen
No. 2—Tin Fount; Capacity 1¾ Pints; Burns 35 Hours; No. 2 Burner, No. 0 Cold Blast Globe, 1 in. Wick; 15 in. High	$13.00

MARSWELLS SHORT GLOBE, COLD BLAST

This Lantern is built in the same substantial manner as our regular Marswells, and is fitted with a short compact Globe, with large top; easily cleaned; Bottom Globe Lift; No. 2 Burner, 1 in. Wick; 15 in. High; Capacity 1¾ Pints; Burns 35 Hours

	Per Dozen
No. 12 —Tin Fount	$14.50
No. 12BF—Brass Fount	22.00
No. 12CF—Copper Fount	22.00

Half Dozen in a Case; Weight 50 Lbs. per Dozen

LANTERNS

MARSWELLS HOT BLAST

Bright Tin, Side Crank Lift, Wire Guard and Lock.

Per Dozen

No. 0—No. 1 Burner, No. 0 Globe, ⅝ in. Wick; Height 14 in.; Holds 1 Pint, Burns 17 Hours. $9.50

One Doz. in Case, Wt. 35 Lbs. Doz.

No. 02—No. 2 Burner, No. 0 Globe, 1 in. Wick; Height 13¾ in.; Fount Holds 1¾ Pints; will burn 19 Hours..... 13.00

One Dozen in Case; Wt. 40 Lbs. Doz.

MARSWELLS MIDGET COLD BLAST

A perfect, Inside Lift, Cold Blast Lantern of small size; No. 1 Burner, ¾ in. Wick; Selected Globe; Height 12 in., Extra Heavy Bottom Seamed to Fount; Every Lantern Tested; will give as much light as the ordinary Lantern of a larger size; Absolutely Windproof

Per Dozen

No. MT All Tin $10 00

No. MB—All Brass 19 00

Half Dozen in Case; Wt. 35 Lbs. Doz.

BOY OR CADET

This is a very Handy Lantern to have about the House or Basement; it is light and convenient and will answer the purpose of a high priced Lantern in many cases.

Per Dozen

No. 10—All Brass; Height 7¼ In., Holds ¼ Pint, will Burn 6 Hours Special Globe 4¼x2¾ In., lighted without removing Globe; No. 0 Convex Burner; Fitted with ⅜ In. Wick..... $5 00

One Dozen in a Box; Weight 7 Lbs. per Dozen

DASH LANTERNS

MARSWELLS

Per Dozen

No. 2D—Cold Blast; Enameled Body; No. 2 Burner, No. 0 C. B. Bull's Eye Globe, 1 in. Wick; Height 15 in.; holds 1¼ Pints, burns 10 hours; built like a Street Lamp; cannot be blown out $20 00

Half Dozen in a Case; Weight 80 Lbs. per Dozen

MARSWELLS

Per Dozen

No. 0D—Hot Blast; Enameled Body; No. 1 Burner, No. 0 Bull's Eye Globe; ⅝ in. Wick; Height 12½ in.; holds 1 Pint, burns 17 hours $13 50

Half Dozen in a Case; Weight 52 Lbs. per Dozen

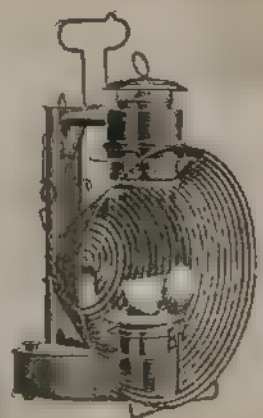
MARSWELLS HOOD REFLECTOR

Bright Tin, with Hand Bail and Dash Attachment; is an excellent Lantern for the Stable and is much used for night driving; throws a strong Light more than 100 feet

Per Dozen

No. 0HF—No. 1 Long Cone Burner, ⅝ in. Wick; 7 in. Fount and Frame; No. 0 Globe; Fitted with a 5 in. Silvered Glass Reflector, Retinned Hood 6 in. Deep, Height 13 in., Holds ¾ Pint, Burns 15 hours..... $22 00

Half Dozen in Case; Wt 64 Lbs. Dozen



SEARCH LIGHTS

COLD BLAST

Bright Tin Reflector; Used in Livery Stables, Mills, Warehouses, Lawns and as Dash Lanterns; Throws a Brilliant Light; Is filled, lighted, etc., without removing Globe; Cannot be Blown Out.

Per Dozen

No. 20—No. 2 Burner; Enameled Frame; 1 in. Wick; No. 0 Cold Blast Globe with Bull's Eye in Globe; 12 in. Reflector, 7 in. Deep, 14½ in. High, Holds 2 Pints and will Burn 25 Hours with One Filling; Blue Japanned. $30 00

No. 40—No. 3 Burner; 1½ in. Wick; No. 2 Plain Street Lamp Globe, 16 in. Reflector 20½ in. High Holds 4½ Pints and will Burn 30 Hours at One Filling, Green Japanned Tin. 72 00

One in a Box; Weight 24 Lbs. Each, ¼ Doz. in Case, Wt. 100 Lbs. per Doz.

LAMPS AND LANTERNS

Dash Bracket

NEVER OUT DRIVING LAMPS

Will not jar out on the roughest roads; the strongest wind will not blow it out; it throws a powerful front and rear white light and red side lights as required by law; Burns Kerosene; the patent insulated Reservoir prevents it from becoming Oily.

Made of heavy gauge drawn brass, no solder to melt; all parts are riveted or clinched together; has large Reservoir, burns 20 hours with one filling.

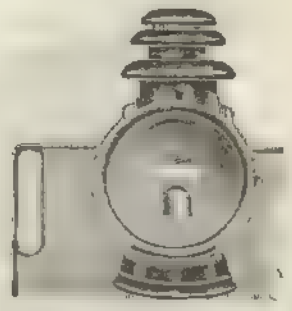
The Dash Bracket has a Universal Clamp which can be attached to practically any projection on a Carriage or Wagon; the Bolts are made of steel and threads can not strip.

Made in Rights and Lefts, fits any Standard Finger In., Depth 4¼ In., Width 4¼ In., Diam. of Face 4⅝ In. Height 9¼

	Each
No. 44L—Left Hand Lamp, Complete with Bracket	$5 00
No. 44R—Right Hand Lamp, Complete with Bracket.	5 00

One in a Box; Weight 2½ Lbs. Each

Left Hand Lamps are commonly used and will always be sent unless Right Hand is specified.



HEAVY DRIVING LAMPS

20 Candle Power, Perfect Combustion; has Hand Bail and can be fastened to front or side of Dash or to Carriage Bracket with Dash Holder; throws strong Light 200 ft. or more.

	Per Dozen
No. 200—Japanned Steel Body, 11 in. High, Flint Glass Lens, 5 in. Diam.; Burner takes ½ in. Wick, Reservoir Holds 1¼ Gills of Oil, will burn nearly 10 Hours at one Filling.	$42 00

Half Dozen in Case, Wt. 70 Lbs. Dozen

Extra Holders, to attach to Side of Dash $4 00

MARSWELLS CAR INSPECTOR'S LANTERNS

These Lanterns are fast replacing the old Oil Torch and coming into use on the principal railroads; Reflects 7 Candle Power; Fitted with Rigid Handle and Hand Grip for Easy Manipulation; Wick readily regulated from Outside, and Globe can be quickly removed for cleaning.

	Per Dozen
No. OC1—No. 1 High Cone Burner; ⅝ in Wick; No. 0 Tubular White Globe; 14 in. High; 5 in. Silvered Glass Reflector; will burn 20 Hours with one filling, Bright Tin	$22.00

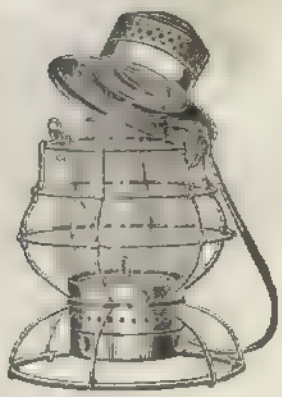
One Half Dozen in a Case
Weight 66 Lbs. per Dozen

SWITCHMAN'S LANTERNS

Fitted with Patent Adjustable Wood Bail; will hold lantern rigid or let it swing free; the Flame is easily regulated without removing the Fount, burns Lard Oil.

	Per Dozen
No. 039—Bright Tin; Height 9 In.; Brass Burner; Removable Fount; Globe is Strongly Guarded	$25 00

Open Stock; Weight 27 Lbs. per Dozen



RAILROAD

	Per Dozen
No. 39W Bright Tin No. 1 Special Outside Ratchet Burner with Long Shaft, ⅝ in. Wick, No. 39 White Globe, Double Wire Guard; uses Signal Oil; will Burn 24 Hours.	$16 00

One Doz. in Case Wt. 47 Lbs. Doz.

RAILROAD

Bright Tin, No. 1 Outside Ratchet Burner, ⅝ in. Wick, No. 39 Globe Double Wire Guard, 15 Signal Oil to 1 Part Kerosene, 2 Parts Lard, Will burn 18 Hours.

	Per Dozen
No. 39C—With Clear Globe	$12 00
No. 39R—With Ruby Globe	15 00

One Doz. in Case; Wt. 50 Lbs. Doz.

QUEEN, CONDUCTOR

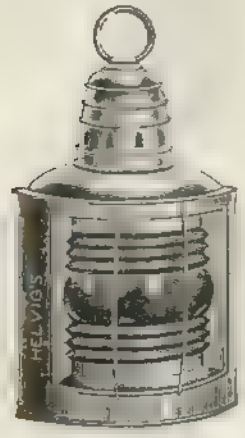
Heavy Brass Nickel Plated, Hinged Top, Removable Fount, Spring Globe Holder, No. 1 Burner, ⅝ in. Wick, Queen Globe; uses Signal Oil, will burn about 15 Hours

	Each
No. CC—With Clear Globe	$ 9 00
No. CG—With Half Green Globe	10 25
No. CR—With Half Ruby Globe	10 75

One Doz. in Case; Wt. 75 Lbs. Doz.

MARINE SIGNAL LIGHTS

For Kerosene; Galvanized Iron, No Chimney, Fresnal Glass Globe, Polished Reflector; Guaranteed to burn in any and all Weather Conditions

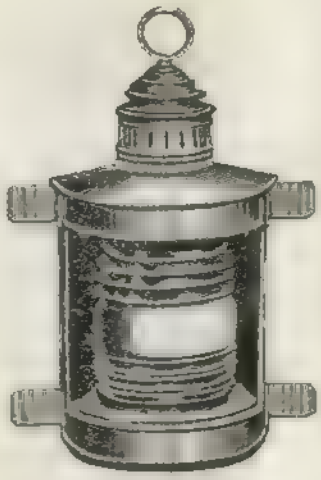


SIDE LIGHTS — Each

No. 9S—Green, Starboard or Right Side Light 5¾x6½ in. Globe, No. 1 Burner, ⅝ in. Wick; Height 15 in., Width of Base 10 in., holds ½ Pt., Burns 24 Hours $9 00

No. 9P—Red, Port or Left Side Light, otherwise same as above 9 00

Weight 7¾ Lbs. Each



BOW LIGHTS — Each

No. 14—Clear Globe, 6x6 in.; No. 1 Burner, ⅝ in. Wick; Height 15 in., Width of Base 9½ in., holds ½ Pt., Burns 24 Hours $8.00

Weight 6½ Lbs. Each

ANCHOR LIGHTS — Each

No. 22—Clear Globe, 5½x6 in.; No. 1 Burner, ⅝ in. Wick; Height 18 in.; Holds ¾ Pint; Burns 28 Hours..... $8 50

Weight 6¼ Lbs. Each

STREET LAMPS

HANGING

Can be regulated to burn 4, 6, 8, 12, 16, 20 or 24 hours and automatically extinguish; Burns Kerosene; Tin Frame Painted Green; 22½ Candle Power; No. 3 Burner, 1⅛ in. Wick, No. 3 Globe; Filled, Lighted and Regulated from the Outside.

Each

No. 3H—Globe Hanging, 22 in. High; Weight 24 Lbs. Each..$5.00

One in a Case

POST

Can be regulated to burn 4, 6, 8, 12, 16, 20 or 24 hours and automatically extinguish; Burns Kerosene; Tin Frame Painted Green; 22½ Candle Power; No. 3 Burner, 1⅛ in. Wick, No. 3 Globe; Filled, Lighted and Regulated from the Outside.

Each

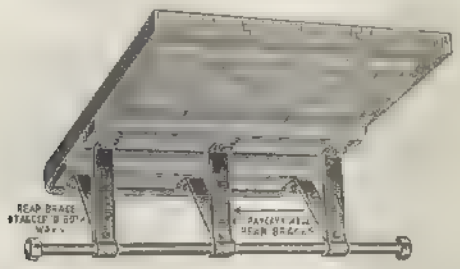
No. 3P—Globe Post, 26 in. High, with Socket for Post or Bracket; Weight 26 Lbs. Each.....$5 00

One in a Case

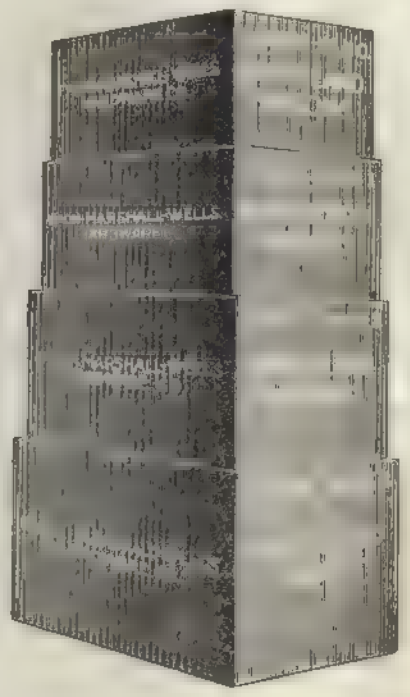
NORTHLAND STEEL EXPRESS WAGONS

Northland Wagons are built for service, and one of them will answer every purpose to wh ch a boy can put it; the many special features noted below which add strength to the Wagon will be appreciated as adding value, and at the same time the cost is not increased

Shows the Wagon complete ready for use; Note the many special features which help to make it so desirable and practical.



Shows the Wagon complete ready for use Note the many special features which help to make it so desirable and practical. Shows Bottom Board of Selected White Pine, which is Tongued, Grooved and Glued, giving the strongest possible construction; Notice also the Extra Rear Brace, and that Bottom Boards are reinforced with Cross Cleats, giving strength where it is needed.



Shows our way of Packing Northland Steel Express Wagons ⅛ Dozen, Complete Wagons in a Sealed, Dust-Proof Carton; No chance for breakage or marring and the fresh new appearance is preserved.

NORTHLAND, ALL-STEEL EXPRESS WAGONS

Sheet Steel Body strengthened with Corrugations at Top and Bottom and Reinforced with Heavy Wire running around the Top, the Bottom Board is made of ¾ in Selected White Pine and is Tongued, Grooved and Glued in the most substantial manner possible; the No N1 and larger Sizes have an Extra Brace attached to Body and Rear Axle, giving greater strength where a great many Express Wagons are weak, All Rear Braces are Staggered both ways so they will brace both backward and forward, the Wheels have Half Oval Steel Rims and are filled with Extra Heavy Spokes.

The Steel Gearing is Black Enameled; the Body is Bright Red Outside and Light Blue Inside

Nos.	N04	N03	N02	N0	N1	N2	N3	N4
Body, In.	18x9	20x9	22x10	24x11	26x12	28x13	30x14	32x15
Diam. Wheels, In.	6	8	8	10	10	11	11	11
Weight Dozen, Lbs.	70	80	90	140	160	195	210	245
Per Dozen	$18.00	21.00	24.00	30.00	34.00	38.00	42.00	46.00

Packed ⅛ Dozen in a Sealed Carton; Wheels, Gears and Handles are all Packed inside the Body; We do not break Cartons

EXTRA WHEELS FOR NORTHLAND WAGONS

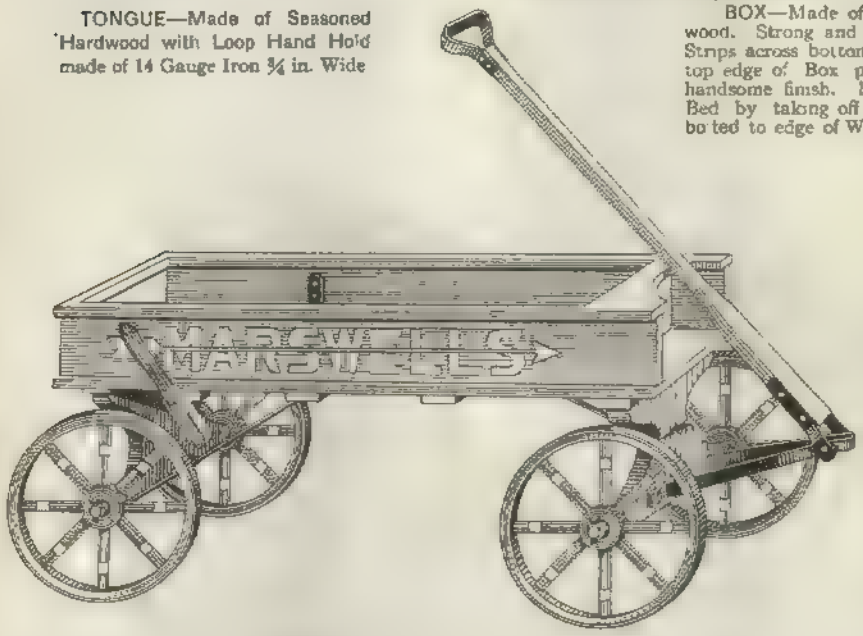
Nos.	6W	8W	10W	11W
Diam, In	6	8	10	11
For Wagons, Nos.	N04	N03, N02	N0, N01	N2, N3, N4
Weight Each, Lbs.	¼	⅜	½	¾
Each	$0.35	.40	.50	.60

MARSWELLS COASTER WAGONS

A New and Original Design; Distinctive in Appearance and Finish; Unexcelled in Strength and Quality of Material and Workmanship

TONGUE—Made of Seasoned Hardwood with Loop Hand Hold made of 14 Gauge Iron ¾ in. Wide

BOX—Made of ½ in. Well Seasoned Hardwood. Strong and Roomy. Has four Hardwood Strips across bottom, ½ in. Thick. Strips around top edge of Box protect the sides and add a handsome finish. Box is easily removable from Bed by taking off four Nuts. Brake is securely bolted to edge of Wagon Bed



Serves equally well for Coasting or General Purposes

NEW WHEEL CONSTRUCTION

The Spokes are ¾ in. in diameter, of hard maple with rims or felloes of ⅝x½ in. rock elm. The Hub Sockets for Spokes are of extra depth, permitting Spokes to be driven down far enough to secure an absolutely stiff wheel.

The Tires are first swedged on with special machinery, and then, to make it impossible for the tire to work off, they are riveted through the felloes. The Hubs are of cast iron, thus permitting of no shrinkage whatever. The extra thick spokes, deep sockets and riveted tires are the special features of the Marswells, which we think, without question, gives us the best coaster wagon wheel made.

BODY—Is beautifully finished in Natural Wood with Red and Green Stencil and Striping. Removable Box.

GEAR—The bolsters are 1¼ in. Hard Maple and Rock Elm braced to bottom of Bed with two rear and One Front Brace. Braces are made of ⅛ in. Round Edge Iron. Front Brace is attached to King Bolt. Fifth Wheel is made of Malleable Iron. Tongue Draw and Steering Gear of ¾x⅛ in. Wrought Iron securely bolted in Front Axle.

AXLES—Are made of ⅞ in. Round Steel in place of ⅞ or ½ in. material usually used on similar wagons, Cotter Pins do away with the loss of Nuts.

WHEELS—Extra Heavy Wheel Rims of Selected Rock Elm ¾x1½ in.; Iron Hubs which cannot split or check, hold spokes solid and eliminates shrinkage and loose tires. Tires of ¾x⅛ in. Wrought Steel and Welded Swedged on by Special Machinery. Cannot come off. Wheels are painted Bright Red.

Per Dozen

No. M1—Size of Bed 14x32 in., Diameter of Wheels 10 in., Width of Tire ¾ in., Diameter of Axles ⅞ in. $50 00

Weight 390 Lbs. per Dozen
Packed Two in a Crate

No. M2—Size of Bed 16x36 in., Diameter of Wheels 10 in., Width of Tire ¾ in., Diameter of Axles ⅞ in. $66 00

Weight 420 Lbs. per Dozen
Packed Two in a Crate

No. M3—Size of Bed 18x40 in., Diameter of Wheels 10 in., Width of Tire ¾ in., Diameter of Axles ⅞ in. $72 00

Weight 450 Lbs. per Dozen
Packed One in a Crate

No. M4—Size of Bed 13x28 in., Diameter of Wheels 8 in.; Diameter of Axles ⅞ in.; Non-Removable Box; Tongue without Loop $40 00

Weight 220 Lbs. per Dozen
Packed Two in a Crate

No. M2 will carry two ordinary 8 gallon Milk Cans and was designed to meet this special

We do not break Crates

MARSWELLS BALL BEARING COASTER WAGONS

The Easiest Running Coaster Made, because it is constructed on the same plan as a Bicycle; Just the kind of a Wagon that every boy wants; Something he can be proud of and one that his father can use to haul a few kegs of Nails, Cream Cans, a Barrel of Apples, Flour or a hundred and one things that require a Strong, Easy Running Wagon; Notice the Brace from Front Bolster to the Rear End of the Handle

We Illustrate Our New Marswell Ball-Bearing Coaster in this manner in order to show its Easy Running Features; A small Boy can haul a heavy load up hill

MARSWELLS BALL-BEARING COASTER WAGON

The Body is made of Selected Elm and Maple, Natural Finish, with Red Trimmings; The Handle has an easy grip for the Hand; Every part is strongly braced; Complete with Brakes which is securely bolted to Wagon Bed

	Per Dozen
No. 10—Size of Body 14x32 in.; Weight 396 Lbs. per Dozen..	$50.00
No. 11—Size of Body 16x36 in.; Weight 426 Lbs. per Dozen..	60.00
No. 12—Size of Body 18x40 in; Weight 455 Lbs. per Dozen...	75 00

The Illustration at left shows the unusually strong construction of the Marswells Wheels; The Rim has been split so as to show how the Spokes pass clear through and are riveted to the Tire; The Spokes are made of Selected Maple, Mortised or Tenoned into the Felloe or Rim and Butt Sunk and Wedged into the Iron Hub; The Rims are Rock Elm; The Iron Tires are ⅛x¾ in. and in addition to being riveted they are Welded and Shrunk on, and cannot possibly come off; The Balls are Case Hardened and run freely in a Steel Container or Cage and cannot become lost; This feature makes it as easy to set up the Marswells Ball-Bearing Coaster as a common plain bearing wagon.

The Heavy Malleable Iron Fifth Wheel and the ⅞ in. King Bolt add greatly to the strength of this Wagon and makes a Gear which cannot be bent inward no matter how hard the Coaster bumps against the curb or stones; The Axles are made of ⅞ in. Round Steel and the Wheels are secured with Cotter Pins, doing away with the loss of Nuts; The Box is Removable.

The Ball Bearings are in a Steel Case and Cannot Come Out.

HARTFORD WAGONS

New and Original Construction, together with Distinctive Appearance and Exceptional Finish place the Hartford Wagons in the highest rank. They are Unexcelled in the strength and quality of materials and workmanship

Gear—Bolsters are 1¼" in. Hard Maple, braced to bottom of Bed with two Rear and one Front Brace, these Braces are ⅛ in. Wrought Steel; Front Brace is attached to King Bolt; Fifth Wheel is Wrought Steel; Tongue Draw and Steering Gear is ¼x⅛ in. Wrought Iron.

Axles—Made of ⅛ in. Open Hearth Steel (Not ⅛ in. material used on similar wagons.)

Right and Left Axle Nuts—Care should be taken in fitting axles so that same are not reversed causing Axle Nuts to turn off.

Wheels—Fitted with Extra Strong No. 9 Gauge Spokes and Extra Wide Tires; Large Barrel Outer Bearing Anti-friction Hubs.

Body—Made of 24 Gauge Steel flanged over ¼ in. Steel Rod; Three Corrugations near the Top Edge and one near the Bottom add to its strength and appearance. The Bottom Boards are made of ¾ in. kiln dried Lumber joined by tongue and groove and securely glued This is the strongest and most expensive Bottom possible to obtain. Copper-plated Washers under all Bolt Heads prevent working of Bolts through the wood.

Finish—Enameled, Varnished and Decorated by hand in Two Different Color Combinations, red and green, and blue and green; Gold letters and decorations.

Tongue—Made of Close Grained Hardwood so ironed that it will stand upright in any position and permits it being thrown back, making a practical Coaster; Fitted with Steel Loop Handle

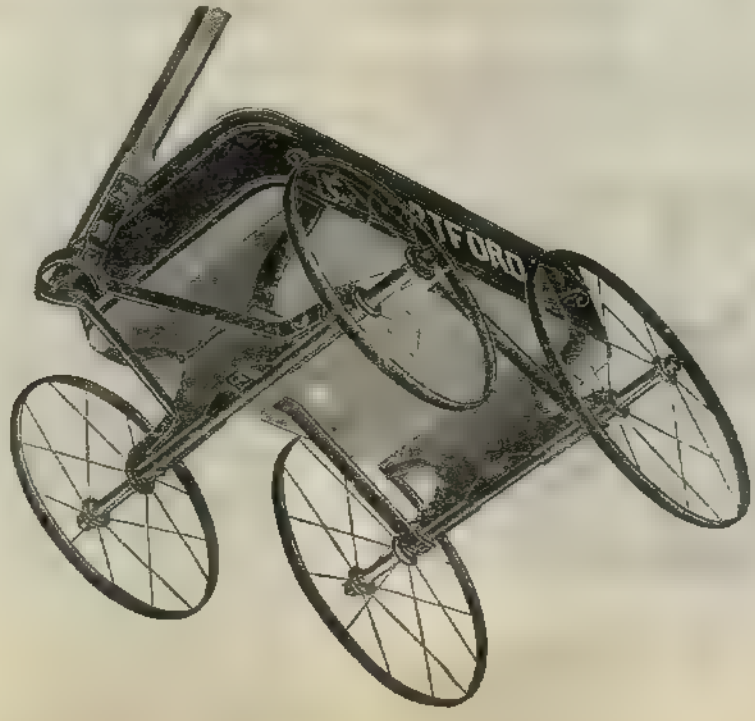
Note how the Tongue can be thrown back over body, making a Practical Coaster

	Size of Body, In.	Diam. Wheels, In.	Weight Doz., Lbs	Per Dozen
No. H0	12x24	11 and 14	270	$30.00
No. H1	13x26	11 and 14	280	33.00
No. H2	14x28	11 and 14	290	36.00
No. H3	15x30	11 and 14	300	40.00

One-Sixth Dozen in a Carton; We do not break Cartons

Packing

Sealed Carton contains ⅙ Dozen Wagons; Fully protected against rough Handling; being dust-proof the finish and fresh appearance is preserved while in transit and in stock; Assorted colors in each carton.



OXY-ACETYLENE WELDING AND CUTTING OUTFITS

CARBIC COMBINATION

One Man Portable Outfits for use in Machine Shops, Foundries, Contractors, Garages, Railroads, Boiler Shops, Repair Shops and Industrial Plants, and in fact, wherever Welding or Cutting is to be done

Compact, Reliable, Foolproof, Economical, Efficient

The Carbic Portable Generator uses Carbide put up in Cake Form which insures the gas being generated only as required at a cost of less than 1½ cents per cubic foot.

A full charge is 6 to 8 No. 20 Carbic Cakes, although on a small job one Cake only can be used as required; the Cakes are placed one above another in the Container, water coming in contact with the bottom Cake only, so that if after a few minutes' use gas is no longer required, the Valves may be shut and the Generator stops instantly; the top Cakes and the unused part of the bottom one, can be removed and stored in the Air-Tight Steel Drums in which they come packed, and can be used later, as they do not deteriorate nor depreciate.

Owing to the method of generation, the used Carbide or Sludge, falls through the water to the bottom of the Container where it can easily be removed when recharging.

The Carbic Generator produces gas on the job when and where wanted, at a low pressure, insuring safety; There is no large amount of gas stored and no moving parts; the Generator may be upset when in operation without danger.

Interior View of Generator
Note Simple Construction and Accessibility of Parts

As compared with Compressed Acetylene in Tanks or Cylinders, the Carbic insures a vast saving not only in the much lower cost per foot for the gas but also in freight and drayage back and forth on empty and filled tanks, to make no mention of the inevitable annoyance of uncertain delivery, due to non-shipment or railroad delays.

The Generator is light and compact and easily portable, the Diameter of Outer Container is only 14 in., the Height 13 in., the Height to Top of Generator 51 in., Weight 70 Lbs. empty; Easily cleaned.

No inaccessible pockets, merely empty Sludge Can when recharging.

Per Outfit

No. 220 Outfit consists of One Carbic Portable Gas Generator One Carbic Low Pressure Blow Pipe (shown below), with Five Welding Heads and Three Cutting Nozzles as selected, One Carbic Oxygen Pressure Regulator, 15 ft. of ⅜ in. Reinforced Non Kinkable Oxygen Hose, 15 ft. of ¾ in. Reinforced Acetylene Hose with Clamps for both, One Pair Darkened Spectacles, One Pair Gloves and One Drum of No 20 Carbic Cakes; **the Oxygen Cylinder is not supplied with the Outfit**.....$300.00

Weight About 140 Lbs. per Outfit

There are 7 Welding Heads and 5 Cutting Nozzles from which to select from; If desired, customer can take the 7 Welding Heads only

The Combination Welding and Cutting Blow Pipe (Carbic pattern) is the best balanced made and is remarkably easy to handle and with the interchangeable Heads and Nozzles is suitable for either Cutting or Welding. The Heads and Nozzles supplied as standard will weld Metal from ⅛ to 3 in Thick and will cut Steel from ⅛ to 5 in Thick, a wider variation can be had if stated when ordering The Six Preheating Jets in the Cutting Nozzle enable cuts to be made in any direction, without twisting the Blow-Pipe about, Especially suitable for work in cramped places, Removable Shield on Blow-Pipe protects the operator's hands.

Per Outfit

No. 1220—Carbic Blow-Pipe, Complete with Seven Welding Heads or Cutting Nozzles as selected $140 00

Weight 27 Lbs. per Outfit

WELDING TABLE

Cutting Heads, Nos.	1	2	4	7	10	14	20
Oxygen Pressure, at Regulator, per Sq. In., Lbs.	10	12	15	17	23	25 to 30	28 to 32
Approximate Thickness Metal, In.	¼ to ⅛	⅛ to ¼	⅛ to ¼	¼ to ½	½ to ⅝	⅝ to ¾	¾ and over

CUTTING TABLE

Size Cutting Nozzle	1	2	3	4
Oxygen Pressure at Regulator per Sq. In., Lbs.	10, 15, 25, 30, 35	40, 50, 60	65, 70, 75	80, 95, 150
Approximate Thickness Metal, In.	⅛, ¼, ½, ¾, 1	1½, 2, 3	3½, 4, 5	6, 7, 8

"JUSTRITE" MINERS CARBIDE LAMPS

Justrite Miners' Lamps have always been very popular and have given unequalled service; They have been greatly improved from time to time and we believe that those shown on this page are the most satisfactory Lamps it is possible to produce, They are very simple to operate, are easily kept clean and throw a clear brilliant Light, the Containers are knurled to give a strong sure grip when removing; Every Justrite Lamp is built for hard service.

They are made in two parts—Water Reservoir and Carbide Container, drawn from Seamless Brass; Every Lamp is guaranteed perfect in material and workmanship.

To Operate Self-Lighter—Open Lever Valve cover the Reflector with palm of the hand for a few seconds, then draw hand downward over the wheel quickly, which makes a spark and lights the gas instantly; Flints can be renewed.

No. 407

No. 417

LEVER FEED

16.7 Candle Power; 2¼ in. Polished Brass Reflector, with Lighter Attachment; the Lever Feed is entirely different from the old Wire Feed type; It will not clog and requires no shaking or agitating; Advancing the Feed Lever increases the water flow and regulates the flame; the Valve is operated by a Lever sliding back and forth over notches, and held firmly in place by a small spring. This new feed overcomes two serious objections to the old style Wire Feed Lamps.

ROUND HOOK LAMPS

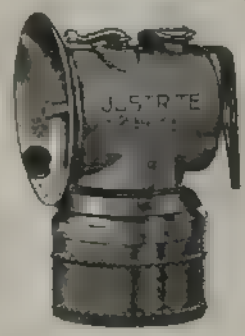
	Each
No. 85R—Polished Brass, with Extra No. 76 Carbide Can	$1.10
No. 407 —Same as No. 85R, without Extra Carbide Can	1.00

FLAT HOOK LAMPS

	Each
No. 85F—Polished Brass, with Extra No. 76 Carbide Can	$1.10
No. 417—Same as No. 85F, without Extra Carbide Can	1.00

One Dozen in a Carton; Weight 6 Lbs. per Dozen

No. 567



No. 577

"NORTHERN SPECIAL"; SPIRAL FEED

16.7 Candle Power; 2⅝ in. Saucer Shape, Polished Brass Reflector, with Lighter Attachment; the Spiral Feed prevents clogging in the water tube; It fits snugly and forces the water to travel around the Spiral Stem a distance of 7 in., this largely increases the gas resistance, prevents waste and produces an even, steady flame; It can be easily cleaned by lifting out the Valve Stem slowly, clean and replace slowly; Can be done in a few seconds without putting out the light.

ROUND HOOK LAMP

	Each
No. 567—Polished Brass; No Extra Container	$1.00

FLAT HOOK LAMP

	Each
No. 577—Polished Brass; No Extra Container	$1.00

One Dozen in a Carton; Weight 6 Lbs. per Dozen

"NORTHERN SPECIAL"; SPIRAL FEED

Designed especially for use of Metal Miners to overcome the clogging caused by use of dirty mine water; the Spiral Stem, with Lever for regulating water flow, is enclosed in a ¼ in. Tube which has two large openings for water to enter; This Stem can be taken out, cleaned and replaced without putting out the light; Simply turn the Lever to the right as far as it will go and lift it out; the water travels around the Spiral Stem a distance of 7 in., largely increasing the gas resistance and preventing its waste

ROUND HOOK LAMP

16.7 Candle Power

	Each
No. 507—Polished Brass; No Extra Container; 2⅝ in. Saucer Shape, Polished Brass Reflector	$1.00

One Dozen in a Carton
Weight 6 Lbs. per Dozen

FLAT HOOK LAMP

16.7 Candle Power

	Each
No. 617—Polished Brass; No Extra Container; 2⅝ in. Saucer Shape, Polished Brass Reflector	$1.00

One Dozen in a Carton
Weight 6 Lbs. per Dozen

FLAT HOOK LAMP

Extra Large Reflector; 18 Candle Power

	Each
No. 637—Polished Brass; No Extra Container; 3 in. Saucer Shape, Polished Brass Reflector	$1.00

One Dozen in a Carton
Weight 7 Lbs. per Dozen

For Extra Bottoms and Containers, See Page 354
Use Miners' Special Carbine, shown on Page 349

EXTRA PARTS FOR JUSTRITE LAMPS

ADJUSTABLE REFLECTORS

Increases the Candle Power to 16 7; Can be used on any Justrite Lamp; Diam 3 in.

Per Dozen

No. 225—Brass, Polished $3.00
+No. 25—Aluminum, Polished 3.00

One Dozen in a Package
Weight ½ Lb. per Dozen

SELF-LIGHTER REFLECTORS

Lights the Gas with a Rub of the Hand. Adjustable to fit any Justrite Lamp, Diam 2½ in.

Per Dozen

No. 26—Polished Brass $3 00
+No. 27—Nickel Plated 3.60

One Dozen in a Package
Weight ¾ Lb. per Dozen

For Extra Self-Lighter Parts, See Page 354

ADJUSTABLE HOODS

Concentrates the Light directly in front of the Lamp and protects the Flame; Prevents Light from flashing in eyes; Fits any Justrite Lamp.

Per Dozen

No. 15—German Silver, 24 Gauge; Highly Polished $1 80

One Dozen in a Package
Weight ½ Lb. per Dozen

POCKET CARBOLITE CONTAINERS

Safe and Convenient; Fits Pocket or Boot

Per Dozen

No. 76—Made of Light Steel, Tin Coated and Lacquered, Size 3⅝x3½x1¼ in; Ribbed and Double Seamed; Sliding Cover, Holds 7 Oz. of Carbolite $1.20

One Dozen in a Package
Weight 2 Lbs. per Dozen

EXTRA LAMP BOTTOMS

For All Justrite Carbide Lamps, shown on Page 352-2

Per Dozen

No. 68—Polished Brass; Beaded at Center and Bottom; Holds 1¾ Oz. of Carbolite, enough to burn 3 Hours $2 40

One Dozen in a Package
Weight 3 Lbs. per Dozen

JUSTRITE MATCH BOXES

Per Dozen

No. 75—Waterproof; Round Seamless Brass, Nickel Plated; Size 2⅞x⅛ in $1 20

One Dozen in a Package

Weight 7 Oz. per Dozen

No. 66

No. 28

No. 67

No 191

No. 157

No. 192

No. 158

BURNER TIPS

Per Dozen

No. 66—Lava Air Hole Burner Tips, for all Justrite Miners' Lamp; Will not carbonate.....$0.36
No. 28—Brass Shell, with Lava Center, for all Justrite Miners' Lamps .60
No. 67—Lava Tip, for Justrite Lanterns 1 20

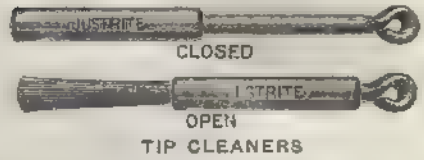
One Dozen in a Box; Average Weight 6 Oz. per Dozen

+BURNER TIPS AND PILLARS

Per Dozen

No. 191—Tip and Pillar, for Nos. 83, 93 and 105 Lamps.....$2.40
No. 157—Tip and Pillar, for No. 51 Lamp..... 2.40
No 192 Tip and Pillar, for 83, 93 and 105 Lamps 2 40
No. 158—Tip and Pillar for No 51 Lamp 2.40

One Dozen in a Box; Average Weight 12 Oz. per Dozen



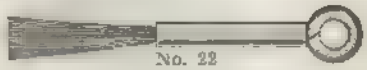
TIP CLEANERS

Per Dozen

No. 37 Each Holder Contains 50 Rust-Proof, Hard Steel Wires; Sliding Cover $1.20

One Dozen in a Box
Weight ⅛ Lb. per Dozen

No. 74



No. 22

TIP CLEANERS

Per Dozen

No 74—Self-Guarding, Point is protected when not in use; Length 2 in., Brass Plated $1.20
No. 22—Wire Brush Cleaner; 50 Hard Steel Wires 60

One Dozen in a Box
Weight ¼ Lb. per Dozen

+For Factory Shipment Only

BURNER REAMERS

Per Dozen

No. 145—Nickel Plated Tube, with One Dozen Hard Steel Reamers, for Cleaning Burners which have become badly clogged.....$0.60

One Dozen in a Box

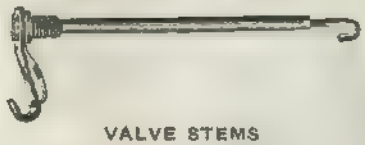
Weight 2 Oz. per Dozen Boxes

EXTRA PARTS FOR JUSTRITE LAMPS

VALVE STEMS

Per Dozen

No. 113—For all Spiral Feed Justrite Lamps.....$3.00
Half Dozen in a Box; Weight 3 Oz. per Dozen



VALVE STEMS

Per Dozen

No. 78—For all Lever Feed Justrite Lamps.....$3.00
Half Dozen in a Box; Weight 3 Oz. per Dozen

CANDLE STICK ATTACHMENTS

Per Dozen

+No. 94—Length 11 in., ¼ in. Steel; for Nos. 83, 93 and 105 Justrite Lamps $3.00
One Dozen in a Box, Weight 2 Lbs. per Dozen
+For Factory Shipment Only

CANDLE STICK ATTACHMENTS

Per Dozen

No. 35—Length 9¾ in., ¼ in. Hard Steel; for Nos. 108 and 109 Justrite Lamps $3.00
One Dozen in a Box; Weight 1¼ Lbs. per Dozen

RUBBER GASKETS

Per Dozen

No. 60—For Justrite Lamps.....$0.30
One Gross in a Package
Weight 1½ Lbs. per Package

FELT GASKETS

Per Dozen

No. 62—For Justrite Lamps..... $0.30
One Gross in a Package
Weight ¾ Lb. per Package

FELT HOLDERS

Per Dozen

No. 64—For Lever Feed Lamps.....$0.50
One Gross in a Package
Weight ¾ Lb. per Package

SELF-LIGHTER PARTS

Per Dozen

No. 172—Extra Flints; One Dozen in a Box.....$1.20
No. 173—Extra Springs; One Dozen in a Box..... .36
No. 174—Extra Screw Caps; One Dozen in a Box..... .60
No. 175—Extra Wheels; One Dozen in a Box..... .60

Per Dozen

No. 176—Fork and Nut; Half Dozen in a Box ...$1.20
No. 177—Self-Lighter Complete; Half Dozen in a Box. 1.80
No. 182—Hexagon Nuts; One Dozen in a Box... ... 24

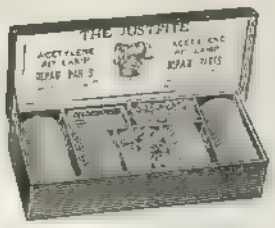
Average Weight 1 Oz. per Dozen

JUSTRITE REPAIR KITS

Each

No. 1—Kit Contains 1 Gross No. 60 Rubber Gaskets, ½ Gross No. 62 Felt Gaskets, ½ Gross No. 66 Burner Tips, 2 Dozen No. 74 Tip Cleaners, 2 Dozen No. 64 Felt Holders $12.00

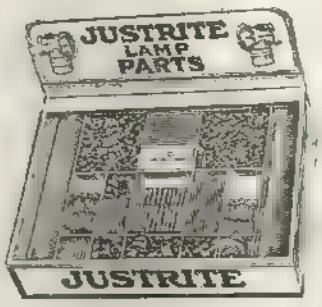
One Assortment in a Box
Weight 2¼ Lbs. per Kit



Each

No. 2—Kit Contains ½ Gross No. 60 Rubber Gaskets, 3 Dozen No. 62 Felt Gaskets, ½ Gross No. 66 Burner Tips, 1 Dozen No. 74 Tip Cleaners, 1 Dozen No. 64 Felt Holders ..$7 00

One Assortment in a Box
Weight 1½ Lbs. per Kit



Each

No. 3—Kit Contains 100 No. 60 Rubber Gaskets; 100 No. 62 Felts; 12 No. 64 Felt Holders; 144 No. 66 Burner Tips; 100 No. 28 Burner Tips; 24 No. 74 Tip Cleaners; 24 No. 22 Tip Cleaners; 24 No. 37 Tip Cleaners; 72 No. 145 Reamers; 12 Only No. 177 Self-Lighters; 72 No. 16 Wires, 9 No. 78 Valve Stems, 12 No. 173 Springs; 12 Only No. 174 Screw Caps; 12 No. 176 Forks and Nuts; 12 No. 181 Water Caps; 12 No. 182 Hexagon Nuts; 4 No. 113 Valve Stems.$26 50

One Assortment in a White Enameled Display Case with Glass Top
Weight 9 Lbs. per Assortment

PORTABLE ELECTRIC LAMPS

No. LB354—Height 20 in., with 16 in. Octagon Shade of Cast Metal Openwork over Light Amber Tuscan Art Glass Panels; Dark French Brown Relief Finish; Fitted Complete for 2 Bulbs, with Pull Chain Sockets, 6 Ft. Silk Parallel Cord and Attachment Plug $16.00

Weight 9 Lbs. Each

No. LB358—Height 20½ in., with 12 in. Square Shade of Cast Metal Openwork over Light Amber Tuscan Art Glass Panels; Dark French Brown Relief Finish; Fitted Complete for 2 Bulbs, with Pull Chain Sockets, 6 Ft. Silk Parallel Cord and Attachment Plug $14 50

Weight 8 Lbs. Each

No. L923—Height 20½ in., with 14¼ in. Hexagon Shade of Cast Metal Openwork over Panels of Art Glass; Grecian Antique Green Finish; Fitted Complete with 1 Bulb, with Pull Chain Socket, 6 Ft. Silk Parallel Cord and Attachment Plug.....$14.00

Weight 8 Lbs. Each

Each

No. LB351—Height 19 in., with 14 in Hexagon Shade of Cast Metal Openwork over Panels of Green and Amber Tuscan Art Glass; Grecian Antique Green Finish; Fitted Complete for 1 Bulb with Pull Chain Socket, 6 Ft. Silk Parallel Cord and Attachment Plug $12.00

Weight 7 Lbs. Each

Each

No. LB349—Height 18 in., with 12 in. Hexagon Shade of Cast Metal Openwork over Panels of Light Amber Art Glass; Patina Brass Finish; Fitted Complete for 1 Bulb, with Pull Chain Socket, 6 Ft. Silk Parallel Cord and Attachment Plug.....$11.00

Weight 6 Lbs. Each

Each

No. LB348—Height 18 in., with 10½ in Square Shade of Cast Metal Openwork over Panels of Light Amber Art Glass; Patina Brass Finish; Fitted Complete for 1 Bulb, with Pull Chain Socket, 6 Ft. Silk Parallel Cord and Attachment Plug.....$8 50

Weight 5 Lbs. Each

PORTABLE ELECTRIC LAMPS

Height 21 in., with 13 in. Square Overlaid Art Glass Shade; Fitted Complete for 2 Bulbs, with Pull Chain Sockets, 6 Ft. Silk Parallel Cord and Attachment Plug.

	Each
No. 787PB—Patina or Brush Brass Finish	$13.00
No. 787VB—Vienna Bronze or Green Finish	13.00

Weight 10 Lbs. Each

Height 21 in., with 15 in. Hexagon Overlaid Art Glass Shade; Fitted Complete for 2 Bulbs, with Pull Chain Sockets, 6 Ft. Silk Parallel Cord and Attachment Plug.

	Each
No. 789PB—Patina or Brush Brass Finish	$12.00
No. 789VB—Vienna Bronze or Green Finish	12.00

Weight 10 Lbs. Each

Height 21 in., with 15 in. Hexagon Overlaid Art Glass Shade; Fitted Complete for 2 Bulbs, with Pull Chain Sockets, 6 Ft. Silk Parallel Cord and Attachment Plug.

	Each
No. 790PB—Patina or Brush Brass Finish	$13.00
No. 790VB—Vienna Bronze or Green Finish	13.00

Weight 10 Lbs. Each

Height 21 in., with 15 in. Hexagon Overlaid Art Glass Shade; Fitted Complete for 2 Bulbs, with Pull Chain Sockets, 6 Ft. Silk Parallel Cord and Attachment Plug.

	Each
No. 791PB—Patina or Brush Brass Finish	$12.00
No. 791VB—Vienna Bronze or Green Finish	12.00

Weight 10 Lbs. Each

PORTABLE ELECTRIC LAMPS

Height 12 in.; One Light, with 9x3¾ in. Hood as shown; Inside Aluminum Finish. Complete with Key Socket, 6 Ft. of Cord and Attachment Plug

	Each
No. LB387BB—Brush Brass and Black Finish	$5 50
No. LB387G —Grecian Green Finish	5 50

Weight 4 Lbs. Each

MISSION STYLE

Most Appropriate and Harmonious for Rooms built or furnished in Colonial Style, which is becoming very popular with Architects, Decorators, Home Builders, etc.

ONE LIGHT ELECTRIC

Height 19 in. Shade [illegible] Green, Green and Brown or Amber Art Glass furnished only; For Ruby Art Glass and its combinations, add 20%; Complete, except Incandescent Lamp

	Each
No. 460 —Plain Art Glass	$3 [illegible]
No. 460F—Plain Art Glass, with Beaded Fringe	[illegible]

Weight 5 Lbs. Each

Cut shows Lamp fixed in position on mirror by Vacuum Cup

[illegible] Lamp [illegible]

THE WALLACE PORTABLE ELECTRIC LAMP

Will stand, hang, clamp or stick any place at any angle. Has an Adjustable and Instantly Removable Shade, an Automatic Spiral Clamp Spring for Clamping Lamp anywhere, a Rubber Suction Cup for sticking securely to any non-porous surface. Equipped **with 10 Ft. Silk Cord and Attachment Plug.**

	Each
No. B—Model B; Nickel Plated Finish with Regular Keyless Socket	$2 75
No. C—Model C; Brush Brass Finish, with Push Button Socket	3 00

One in a Box; Weight 1 Lb. Each

THE PERFEX LAMP

Will stand, clamp or hang anywhere; Has an Adjustable Shade, 6 in. in Diameter. Spring Clamp will hold it securely anywhere.

	Each
No. 4305—Brush Brass Finish; Equipped with 8 Ft. of Cord and Attachment Plug and Key Socket	$2 20

One in a Box; Weight 1 Lb. Each

ADJUSTABLE PORTABLES AND DESK LAMPS

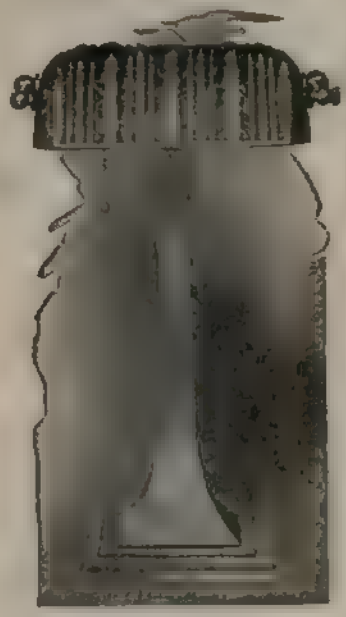
With Adjustable Green Glass Shades, with White Opal Reflecting Surface Inside; These Portables are Approved and are Furnished with Approved Insulator; For Home or Office

Each

No. 3248BB—Brush Brass Finish; Height 15 in. to Center of Shade; For 25 or 40 Watt Lamp; Furnished Complete with 9 Ft. Reinforced Silk Cord, Pull Chain Socket and Plug.....$10.75

Six in a Standard Package

Weight 10½ Lbs. Each



Each

No. 3244BB—Brush Brass Finish; Height 16½ in. to Center of Shade; For 25 or 40 Watt Lamp; Furnished Complete with 9 Ft. Reinforced Silk Cord, Pull Chain Socket and Plug.$13 50

Six in a Standard Package

Weight 11 Lbs. Each

Each

No. 3245BB—Brush Brass Finish; Height 16½ in. to Center of Shade; For 25 or 40 Watt Lamp; Furnished Complete with 9 Ft. Reinforced Silk Cord, Pull Chain Socket and Plug $19.00

Six in a Standard Package

Weight 13 Lbs. Each

PIANO, ROLL TOP OR STANDING DESK LAMPS

Each

No. 3068BB—Brush Brass Finish; Extends 12 in.; Can be adjusted to any angle. For 25 or 40 Watt Lamp; Furnished Complete with 9 Ft. Reinforced Silk Cord, Key Socket and Plug $9.00

Six in a Standard Package; Weight 10½ Lbs. Each

Each

No. 3243BB—Brush Brass Finish; Extends 12 in.; Can be adjusted to any angle. For 25 or 40 Watt Lamp, Furnished Complete with 9 Ft. Reinforced Silk Cord, Key Socket and Plug $8.50

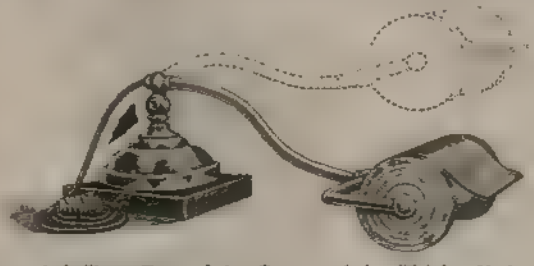
Six in a Standard Package, Weight 10½ Lbs. Each

EXTRA SHADES

Each

No. 2917—Extra Green Glass Hood Shades, for Nos. 3243, 3244, 3245, 3068 or 3243 Portables.....$4.00

Weight 3 Lbs. Each



Enameled Slate Base, 6 in Square, 1 in. Thick; ½ in. Brass Tubing for Arm 9 in. Long, Swiveling on Top of Base; Brass Cylinder 3¾ in Diam., 9 in Long, Frosted Aluminum Finish Inside, Shades the Eyes and directs the light inside or outside the desk; Wired, including Socket and 9 Ft. Reinforced Silk Cord.

Each

No. 3067BB—Brushed Brass $12 00

No. 3067OC—Oxidized Copper 13 00

Weight 10½ Lbs. Each

REED MACHINISTS' OR IRON WORKERS' VISES

These Vises are Fully Guaranteed; Made of Best Quality Materials and are easily operated, All Parts are Interchangeable; All Nuts have Milled Bases and fit into Milled Slots; All Parts are Finished to Limit Gauges

Made of Best Norway Iron; Steel Screw; Channel Steel Jaws, Milled and Cut; Adapted to Heavy Work of All Kinds

STATIONARY BASE; STATIONARY JAWS

Nos.	Width of Jaws, In.	Jaws Open In	Weight Each, Lbs.	Each
103	3	4	22	$12 00
104	4	6	41	17.00
104½	4½	7	54	20 00
105	5	8	71	26.00
106	6	10	128	50.00

SWIVEL BASE; STATIONARY JAWS

Nos.	Width of Jaws, In.	Jaws Open In.	Weight Each, Lbs.	Each
203	3	4	28	$15 00
204	4	6	49	21 00
204½	4½	7	64	25.00
205	5	8	87	32.00
206	6	10	147	60.00
207	7	12	203	85.00

STATIONARY BASE; SELF-ADJUSTING JAWS

The Self-Adjusting Jaws Grip Tapered or Odd Shaped Pieces

Nos	Width of Jaws, In	Jaws Open In	Weight Each Lbs.	Each
303½	3½	4	34	$14.00
304½	4½	5½	64	21.00
305½	5½	7¾	116	34.00
306	6	9	141	48.00
307	7	11½	198	60.00

SWIVEL BASE; SELF-ADJUSTING JAWS

The Clamping Bolt for Swivel Base has a V Shaped Head, which fits into a V Shaped Channel, assuring a positive grip

Nos.	Width of Jaws, In	Jaws Open In	Weight Each, Lbs.	Each
403½	3½	4	34	$17 00
404½	4½	5½	64	25 00
405½	5½	7¾	116	38 00
406	6	9	141	54 00
407	7	11½	198	70 00

AUTO VISES

Patented

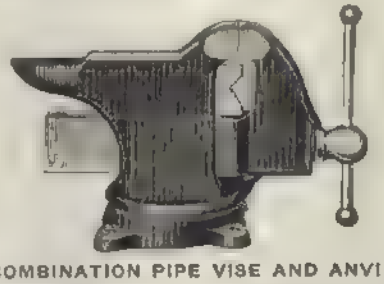
STATIONARY TYPE

Adapted for all Kinds of Repair Work; Has regular Vise Jaws for all kinds of machinists' work, Pipe Jaws for holding Pipe and Rods and can also be used as an Anvil; Especially suitable for the individual automobile owner

Each

No. 231—Width Jaw 3 in., Capacity Pipe ⅛ to 1½ in.....$10.00

Weight 32 Lbs. Each



COMBINATION PIPE VISE AND ANVIL

Especially adapted for Automobile Repair Work; Made of the Best Material Hardened Steel Jaws and Steel Screw and Handle; Fully Guaranteed.

Each

No. 241—Width Jaw 3½ in., Capacity Pipe ⅛ to 2 in..... $16.00

Weight 80 Lbs. Each

MACHANICS' STATIONARY BENCH VISES

Wrought Iron Body; Hardened Steel Jaws; Adapted to Light or Heavy Work

Nos.	Width Jaws Open, Jaws, In.	In.	Weight Each, Lbs.	Each
703	3	3½	18	$10.40
703½	3½	4½	24	12.00
704	4	5½	30	14.00
704½	4½	6½	45	17.00
705	5	7	56	20.80

OVAL SLIDE VISES

Used by Farmers, Carpenters, Wood and Metal Workers for all Light Work

Steel Screw and Handle; Crucible Steel Faced Jaws

Nos.	Width Jaws Open, Jaws, In.	In.	Weight Each, Lbs.	Each
381	2½	3¾	8	$2.50
382	3	4	14	3.00
383	3½	4½	22	4.75
384	4	4½	36	6.50

YANKEE VISES

The Vise is Mounted on a Swivel Base for use on the Bench; The Upper Part is Removable for use on Drill Press, Shaper, etc.; It is easily locked or released by a short movement of Lever on one side; Cast Iron Body; Hardened Steel Faces.

Each

No. 1993—Width of Jaws 2¾ in., Depth 1⅞ in., will Open 3½ in.; Height Over-all 5¾ in., Length Over-all 8¾ in.; Diam. of Base 4½ in.....$5.00

One in a Box; Weight 13½ Lbs. Each

MANUAL TRAINING VISES

ABERNATHY ROLLER NUT

A Rapid Acting, Continuous Screw Vise for Manual Training Schools, Cabinet Makers or Home Shops

Made of the very best quality Gray Iron Castings, well machined and nicely finished, Cold Drawn Steel Slides, Extra smooth and accurately milled Steel Screw; With the highest grade of phosphor bronze hobbed Nut, of more than usual length, which insures strength and long wear. These Vises have but One Part in addition to the elements of an old style slow acting screw vise, and that is the "Roller," which is a large substantial casting, practically impossible to put out of order even by abuse. The "Roller" is a practically balanced cylinder containing a tapered dovetail mortise into which a nut section is removably fitted; The "Roller" simply hangs upon the screw, and due to its weight and the resulting frictional contact between them these two parts the "Roller" rolls in which ever direction the screw is turned

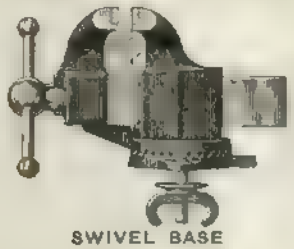
Each

No. 70 —Jaws 7 in. Long, 4 in. Deep; Open 9 in.....$5.50

No. 70D—With Adjustable Dog, Otherwise same as above..... 6.00

Weight 25 Lbs. Each

COMBINATION MACHINISTS' AND PIPE VISES



SWIVEL BASE

Regular Standard Machinists' Vise with Pipe Jaws Added; Vise Jaws have Carefully Hardened Tool Steel Facings; Pipe Jaws are Milled from Solid Tool Steel Bars, Tempered in Oil to Give Toughness; Front Pipe Jaw is Reversible; All Parts are Interchangeable.

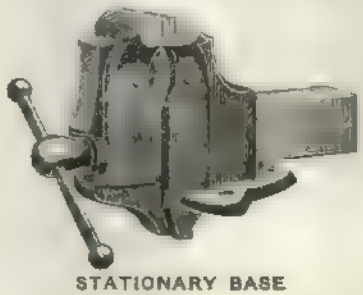
STATIONARY BASE

Nos.	31	32	33	34
Width Jaw, In	3½	4½	5	6
Capacity Pipe, In	⅛ to 2½	⅛ to 3½	⅛ to 4½	⅛ to 6
Weight Each, Lbs	45	72	119	178
Each	$16.00	22 00	32 00	45.00

Nos.	931	932	933	934
Width Jaw, In	3½	4½	5	6
Capacity Pipe, In.	⅛ to 2½	⅛ to 3½	⅛ to 4½	⅛ to 6
Weight Each, Lbs	45	70	115	170
Each	$16.00	22.00	32.00	45.00

SWIVEL BASE

Designed to meet the requirements for a Serviceable Low Priced Article; Made of Semi-Steel; Tool Steel Milled Jaws; Strong and Compact.



STATIONARY BASE

Nos.	7	8
Width of Jaws, In.	3⅝	4⅛
Capacity	Up to 2 in.	Up to 3 in.
Weight, Lbs.	39	57
Each	$16.00	22.00

Nos.	8½	9½
Width Jaws, In.	4⅜	5⅜
Capacity	Up to 4 in.	Up to 6 in.
Weight, Lbs.	75	130
Each	$32.00	45.00

COMBINATION VISES

WALWORTH PATTERN

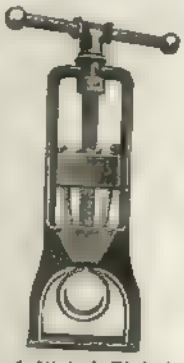
Heavy Bench Vise, 5 in Solid Steel Jaws, Extra Coarse Cut to Grip Pipe Firmly; Holds as well as Angular Jaws and is Handy and Quick in Use; Clamps to Bench; All Parts are Interchangeable.

Each

No. 180—Holds Pipe ⅛ to 6 in. $18.00

Weight 77½ Lbs. Each

STRAP PIPE VISES



For Holding All Kinds of Nickel Plated and Polished Pipe and Tubing Without Marring

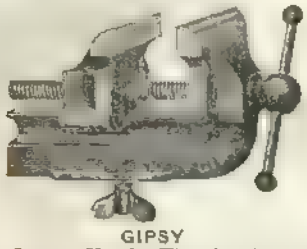
Always Ready; No Bushings to Lose or Change; Use Rosin, Whiting or Chalk on Strap to Prevent Slipping

Each

No. 51—Holds Pipe ⅛ to 2 in. $4 00

Weight 9½ Lbs. Each

PRENTISS WOOD-WORKERS' VISES



GIPSY

Small Size; a Strong Handy Vise for Common Use; Wrought Iron, Japanned, Polished Welded Steel Jaws, Milled and Cut; Polished Steel Screw; Head of Swivel Screw moves in Groove running whole length of Bottom Plate, allowing Operator to move Vise out, in or to any desired angle and fasten.

Each

No. 66—3½ in. Jaws, Open 4 in. $5.00

Weight 14 Lbs. Each

HAND VISES

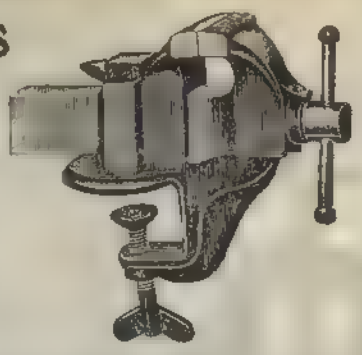
GERMAN PATTERN

Per Dozen

No. 371—Natural Finish Wrought Iron; 4 in. Long, 1⅝ in. Polished Spring Jaws, Opening ¾ in. $6.00

Half Dozen in a Box; Weight 6 Lbs. per Dozen

COMBINED VISES AND ANVILS



VICTOR JERSEY

Jersey Vises are High Grade in every respect; having Hardened Steel Faces, Solid Steel Screws and Square Lathe Cut Thread; Jaws fit perfectly; Used by Tool Makers, Jewelers, Amateurs, etc.

JERSEY VISE ASSORTMENTS

Per Assortment

No. 12—Assortment Contains Twelve Vises, Complete with Stand; Weight 64 Lbs. $14.20

Assorted as Follows:

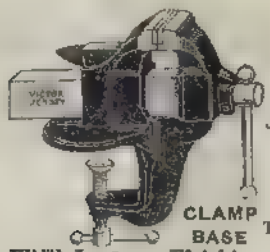
Vise Nos.	741	742	743	744	745	746	761	762	772
Quantity	2	2	2	1	1	1	1	1	1

JERSEY CLAMP BASE, PLAIN IRON JAWS

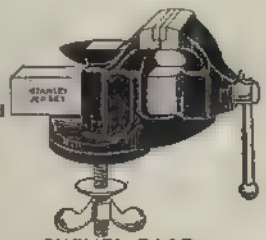
Brown Japanned Finish; for Amateurs

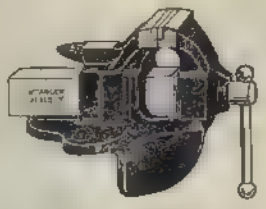
Nos.	Width Jaws	Weight Each	*Each
741	1½ in.	3 Lbs.	$1.40
742	1¾ in.	3¼ Lbs.	1.60
743	2 in.	3½ Lbs.	2.00
744	2¼ in.	4¼ Lbs.	2.50
745	2½ in.	5 Lbs.	3.00
746	3 in.	8¾ Lbs.	4.00

Each Vise Wrapped in Moisture Proof Paper



Hardened Tool Steel Jaws; Brown Japanned





CLAMP BASE

Tissue Paper Wrapped

Nos.	Width Jaws	Weight	*Each
761	1½ in.	3 Lbs.	$1.90
762	1¾ in.	3¼ Lbs.	2.30
772	2 in.	3½ Lbs.	2.60
764	2¼ in.	4 Lbs.	3.10
765	2½ in.	5 Lbs.	3.70
766	3 in.	8¾ Lbs.	5.00

SWIVEL BASE

Nos.	Width Jaws	Weight	*Each
772	1¾ in.	3 Lbs.	$2.50
773	2 in.	3½ Lbs.	2.90
774	2¼ in.	4½ Lbs.	3.50
775	2½ in.	5½ Lbs.	4.20
776	3 in.	9½ Lbs.	5.70

STANLEY JERSEY; STATIONARY BASE

Hardened Tool Steel Jaws; 2 in. Jaws

*Each

No. 653 —Blue Japanned $1.50
No. 653N—Nickel Plated 2.00

One in a Box; Weight 4 Lbs. Each

BONNEY VISE ASSORTMENT SETS

Set of 12 Sizes and Styles, from 1 to 9 Inclusive, with 28 in. Display Stand which Shows the goods to best Advantage. Per Set

No. 12—Made of Cast Iron, Long Steel Screw, Malleable Iron Thumb Screw, all Parts Interchangeable, Wt. 55 Lbs ... $15 00

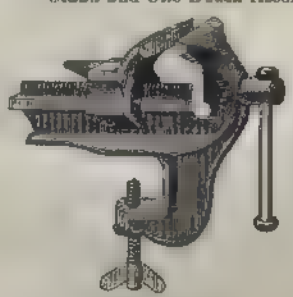
Stand and One Dozen Assorted Vises in a Box

BONNEY, With Swivel Jaw Attachment

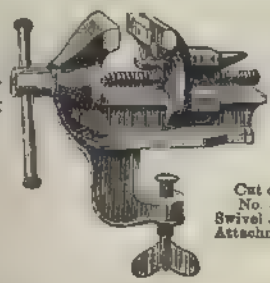
For Gripping Taper Pieces

	Per Dozen
No. 5—2¾ in. Iron Jaws, Open 3¼ in.; Wt. 5 Lbs. Each. ...	$19 50
No. 7—2¾ in. Steel Jaws, Open 3¼ in.; Wt. 5 Lbs. Each. ...	22 50

Open Stock



Especially Designed for All Light Work.



Cut of No. 3 Swivel Jaw Attachment

Used by Jewelers, Farmers, Wood and Metal Workers, etc.

BONNEY

	Per Dozen
No. 1—1½ in. Iron Jaws, Open 2 in.; Wt. 1¼ Lbs. Each..	$3 75
No. 2—2 in. Iron Jaws, Open 2½ in.; Wt. 2 Lbs. Each.	6 50

BONNEY

	Per Dozen
No. 3½—2¼ in. Iron Jaws, Open 2¾ in.; Wt. 2⅞ Lbs. Each..	$8.50
No. 3—2¼ in. Steel Jaws Open 2¾ in., Swivel Attachment; Wt. 2¾ Lbs...	12 00

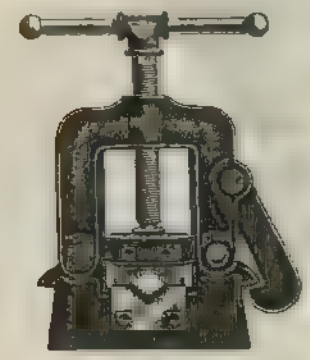
Open Stock

BONNEY

	Per Dozen
No. 4—2¾ in. Iron Jaws, Open 3¼ in.; Wt. 5 Lbs. Each..	$16 50
No. 6—2¾ in. Steel Jaws, Open 3¼ in.; Wt. 5 Lbs. Each	19.50

PIPE VISES

Used by Plumbers, Steam Fitters, Miners, Pumpmen, Machinists, Blacksmiths, etc., for Holding Pipe and Rods while Threading and Cutting



LATCH PATTERN

Malleable Hinged Frame, Tool Steel Jaws, Carefully Tempered and Hardened and Can be Resharpened; Can be Opened Either Right or Left, having Lugs on both Uprights, permitting Latch being Used on Either Side

Nos.	Capacity, Pipe, In.	Weight, Lbs.	Each
700	⅛ to 1½	5	$ 3 00
71	⅛ to 2½	12	6.00
72	⅛ to 3½	15	7.00
73	⅛ to 4½	22	10 00

EXTRA JAWS

	Per Set of 3
For No. 71	$1.85
For No. 72	2.65
For No. 73	3.75

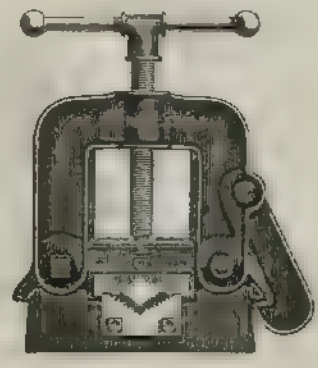
EXTRA HEAVY PIN PATTERN

Heavy Malleable Hinged Frame, Tool Steel Jaws; the Hinged Device allows long Length of Pipe to be quickly inserted at side; Especially adapted for use with Extra Heavy Pipe, and a Favorite with Churn Drill Men.

No.	13
Capacity Pipe, In.	½ to 3½
Weight, Lbs	20
Each	$10 00

EXTRA JAWS

	Per Set of 3
For No. 13	$3.75



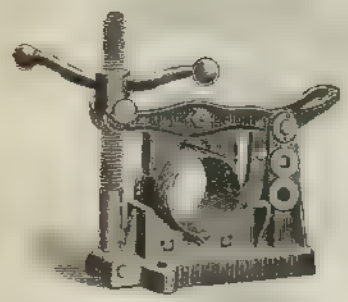
EXTRA HEAVY PATTERN

Malleable Hinged Frame, Tool Steel Jaws, Etc. Much the same as Nos. 71, 72 and 73, except that this is an extra heavy pattern.

Nos.	Capacity Pipe, In.	Weight Lbs.	Each
63	⅛ to 4½	30	$12.50
64	⅛ to 6	50	25.00
65	1½ to 8	80	50.00

EXTRA JAWS

	Per Set
For No. 63	$5.00
For No. 64	10.00
For No. 65	12.00



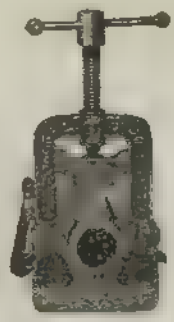
JARECKI PATTERN

Solid Iron Frame; Tool Steel Hardened Jaws; Beam Holding Upper Jaw is Hinged, allowing pipe to be placed in Vise at the Side; Besides Holding Pipe, Bars, etc., this is a Handy Vise for taking Apart old Work.

Nos.	Capacity Pipe, In.	Weight Lbs.	Each
1J	1¼ to 6	67	$24.00
2J	6 to 12	168	60.00

EXTRA JAWS

	Per Set of 3
For No. 1J	$6.00
For No. 2J	15.00



TOLEDO

Malleable Hinged Frame; Tempered Tool Steel Jaws; will hold Pipe, Valves, Tees, Ells, Etc., and will not mar the surface of Brass and Nickel Fittings; Can be Opened Either Right or Left; Jaws can be recut

Nos.	Capacity Pipe, In.	Weight Lbs.	Each
10	⅛ to 2½	18½	$10.00
20	⅛ to 4½	35	20.00

VULCAN CHAIN

Wrought Steel Frame; Drop Forged Saw-Tempered Jaws; Hand Made Chains; Can be Carried in Hand or Tool Bag; All Parts are Interchangeable.

	Each
No. 1V—Capacity Pipe ⅛ to 2 in.; Weight 4 Lbs Each	$3.50
No. 2V—Capacity Pipe ¼ to 4 in.; Weight 10 Lbs. Each	7.50

EXTRA JAWS

	Per Pair
For No. 1V	$1.20
For No. 2V	2 75

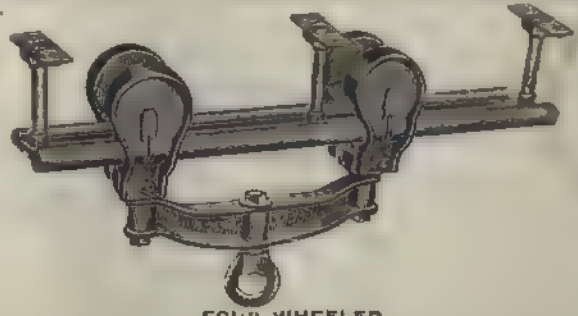
All Above, Open Stock

RELIABLE MERCHANDISE CARRIERS

In Store, Warehouse, Machine Shop, Foundry, Factory, Mill, Packing Houses and hundreds of other places, an overhead carrying system can be a very profitable investment. Grabbed with rope slings, tongs or hooks, box truck, platform, etc; raised by a Chain Hoist or any other Safety Lift and pushed around by even a boy, a large amount of goods or material can be moved quickly, easily and cheaply.

Reliable Carriers are made of best malleable iron, Japanned Black and guaranteed to safely carry the loads listed; the wheels have case hardened bushings, roller bearings and axles; the center shackle is swivel and the connecting bars are free to turn at both ends, for rounding curves or turning load in any desired position. The carrier takes very little space, the track dropping but 4 inches from ceiling. Track hangers are spaced 18 in. apart.

Shipped Direct from Factory at Danville, Ill.



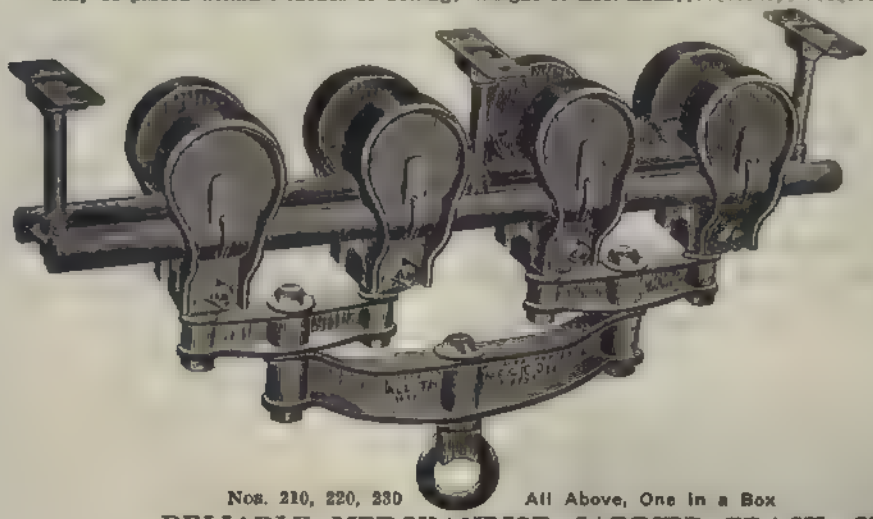
FOUR WHEELER

Each

No. 110—Capacity 500 Lbs.; Carrier 5¾ in. Wide, 16½ in. Long and 13 in. High; Wheels, 3 in. Diam.; Takes No. 11Z Track; Track may be placed within 4 inches of Ceiling; Weight 21 Lbs. Each..... $ 7.00

No. 120—Capacity 1,200 Lbs.; Carrier 6¾ in Wide, 19 in. Long and 15 in. High; Wheels, 2½ in. Diam.; Takes No. 22Z Track; Track may be placed within 5¼ inches of Ceiling; Weight 31 Lbs. Each..... 10.00

No. 130—Capacity 2,500 Lbs.; Carrier 7⅛ in. Wide, 21 in. Long, and 17 in. High, Wheels 4¼ in. Diam.; Takes No. 33Z Track; Track may be placed within 7 inches of Ceiling; Weight 46 Lbs. Each..... 15.00



Nos. 210, 220, 230 All Above, One in a Box

TANDEM, EIGHT WHEELER

Suitable for Heaviest Work in Warehouses, Depots, Foundries and Machine Shops, etc.; Fully Guaranteed to carry load specified.

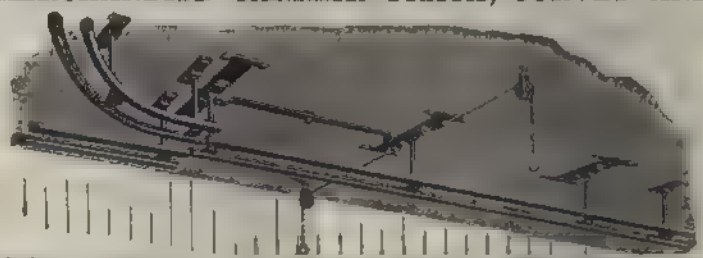
Each

No. 210—Capacity 750 Lbs.; Carrier 5¾ in. Wide, 23½ in. Long and 15 in. High; Wheels, 3 in. Diam.; Takes No. 11Z Track; Track may be placed within 4 in. of Ceiling; Weight 37 Lbs. Each..... $14 00

No. 220—Capacity 2,000 Lbs.; Carrier 6¾ in. Wide, 27 in. Long and 17¼ in. High; Wheels, 2½ in. Diam.; Takes No. 22Z Track; Track may be placed within 5¼ in. of Ceiling; Weight 61 Lbs. Each..... 30.00

No. 230—Capacity 4,000 Lbs.; Carrier 7½ in. Wide, 29 in. Long and 19⅛ in. High; Wheels, 4¼ in. Diam.; Takes No. 33Z Track; Track may be placed within 7 in. of Ceiling; Weight 87 Lbs. Each..... 30.00

RELIABLE MERCHANDISE CARRIER TRACK, CURVES AND SWITCHES



The track is the regular tubular construction of our Reliable Ladder, Barn, Parlor and Fire Door Pattern, in parallel double tread. Double tread ties, ceiling plates and parting pieces are furnished for 18 in. spacing and the carrying capacity is figured on this basis. Two lag screws or bolts for each ceiling plate and one machine bolt for suspending track binder from ceiling plate, are required for each 1½ ft. of track, these are not furnished. ⅜ in. track takes ⅜ in. Lag Screws and ⅛ in. Machine Bolts; 1⅞ in. track takes ½ in. Lag Screws and ⅝ in. Machine Bolts; 1½ in. track takes ⅝ in. Lag Screws and ¾ in. Machine Bolts.

STRAIGHT TRACK

Per Foot

No. 11Z—Merchandise Track, with Supports every Eighteen inches, ⅞ in. Diam., For No. 110 and 210 Carriers $0.36
Weight 2 Lbs. per Foot

No. 22Z—Merchandise Track, with Supports every Eighteen inches; 1⅞ in. Diam.; For No. 120 and 220 Carriers ..... .48
Weight 4½ Lbs. per Foot

No. 33Z—Merchandise Track, with Support every Eighteen inches; 1⅞ in. Diam.; For No. 130 and 230 Carriers .72
Weight 6 Lbs. per Foot

CURVED TRACK

Per Foot

No. 11ZU—Curved Merchandise Track, with Supports every Eighteen inches; ⅞ in. Diam.; For No. 110 and 210 Carriers $1.20
Weight 2 Lbs. per Foot

No. 22ZU—Curved Merchandise Track, with Supports every Eighteen inches; 1⅞ in. Diam.; For No. 120 and 220 Carriers 1.44
Weight 4½ Lbs per Foot

No. 33ZU—Curved Merchandise Track, with Supports every Eighteen inches, 1⅞ in. Diam.; For No. 130 and 230 Carriers..... 1.80
Weight 6 Lbs. per Foot

SWITCHES

Mounted, Complete with Bolts

Each

No. 112—Two Way Switch for No. 11Z Track, Weight 120 Lbs. Each....$50.00

No. 113—Three Way Switch for No. 11Z Track, Weight 180 Lbs Each.... 60.00

No. 222—Two Way Switch for No. 22Z Track, Weight 125 Lbs Each.... 50.00

No. 223—Three Way Switch for No. 22Z Track; Weight 185 Lbs. Each.... 60.00

No. 332—Two Way Switch for No. 33Z Track; Weight 130 Lbs Each.... 50.00

No. 333—Three Way Switch for No. 33Z Track; Weight 190 Lbs. Each.... 60.00

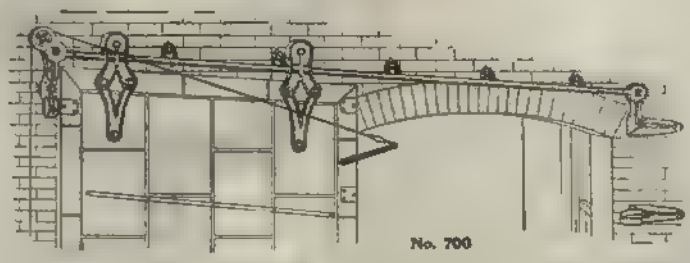
In Ordering, give No. and Size of Track

ALLITH SLIDING FIRE DOOR FIXTURES AND DOORS

For Outside or Inside Doors, Fire Wall Openings, Shutters, etc., Running Right and Left

UNDERWRITERS INSPECTED HARDWARE LABORATORIES

Hangers, Track and Fixtures are Approved and Accepted by the National Board of Fire Underwriters. Will mail Blue Prints of Approved Hardware and Doors on Application.



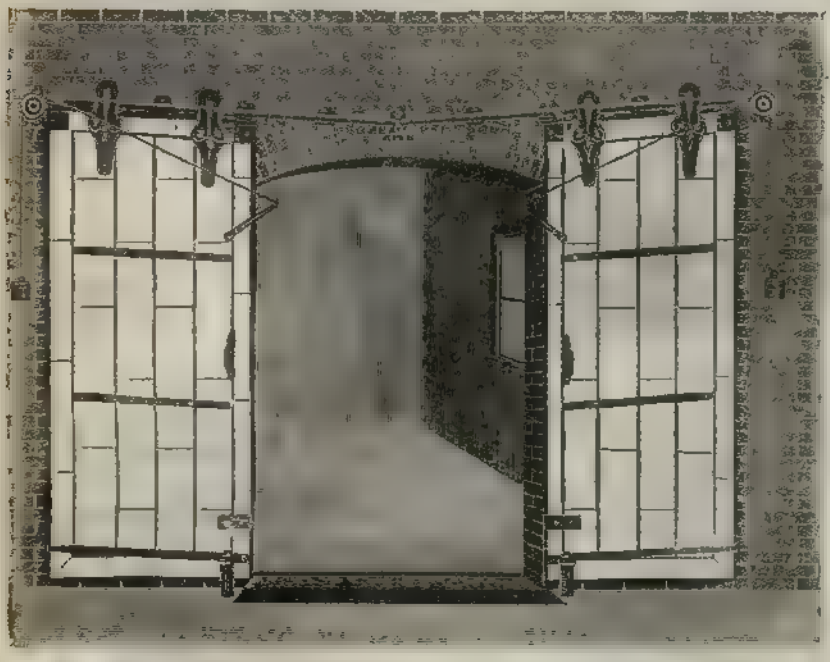
No. 700

FOR SINGLE SLIDING DOOR

This Style is often preferred because of its Simplicity and ease of application; It has one Link fastened to the front of Door and projecting into opening

	Per Pair
No. 3—Hangers; Weight 20 Lbs. per Pair	$4.20
No. 6—Hangers, Double Adjustable; Weight 30 Lbs. per Pair	6.00
	Per Foot
No. 3T—Track, with Supports, Length of Track required is twice the Width of Opening, plus one foot; Weight 2¼ Lbs. per Ft.	$0.30
	Per Set
No. 700—Fixtures; Not including Hangers and Track; Weight 86½ Lbs. per Set	$12.00
No. 700A—Fixtures, Same as No. 700, except without Chafing Strips for Front and Rear, Reinforcing Strip and Steel Angles; Weight 68 Lbs. per Set	9.50

For Hangers and Track, See Page 227



FOR DOUBLE SLIDING DOORS

This Style of Door, sometimes known as Split Slide Doors, is intended for use on openings which are so situated as to make it impossible to use Single Slide Doors.

	Per Set of 4
No. 3—Hangers; Weight 60 Lbs. per Set	$8.40
No. 6—Hangers, Double Adjustable; Weight 60 Lbs. per Set	12.00
	Per Foot
No. 3T—Track, with Supports; Weight 2¼ Lbs. per Foot	$0.30

Length of Track required is twice the Openings, plus 8 in.

	Per Set
No. 1700—Fixtures; Not including Hangers and Track; Weight 146½ Lbs. per Set	$21.00

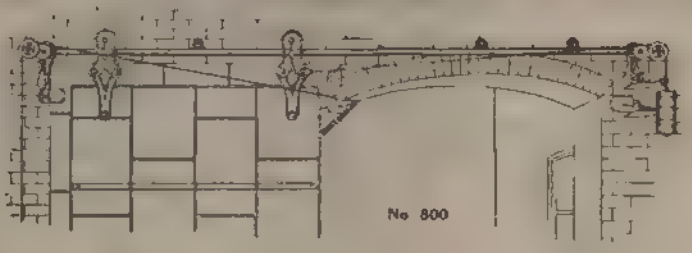
Note that the Wall Bolts are not included; Those required are, One for each of the Brackets, Back Stop, Upper and Lower Binder, Stay Roller and Pulley, all ⅝ in. Diam., to go through the wall

	Prices on Specifications	Per Sq. Foot
2½ in., Three Ply Fire Door, Tin Covered, Made to Size Ordered, Underwriters' Specifications		$0.80

ALLITH SLIDING FIRE DOOR FIXTURES

UNDERWRITERS INSPECTED HARDWARE LABORATORIES

This Stamp appears on all our Sliding Doors and Fixtures



LEVEL SLIDE

This Style is intended for use on openings which have 12 inches of Head Room or slightly more, but not enough for the Regular Incline Slide Fixtures

Per Pair

No. 2—Hangers; Weight 20 Lbs. per Pair..... $4.20

No. 6—Double Adjustable Hangers; Weight 30 Lbs. per Pair..... 6.00

Per Foot

No. 3T—Track, with Supports; Length of Track Required is Twice the Width of Opening, Plus 1 Foot, Weight 2¼ Lbs per Foot.... $0 30

Per Set

No. 800—Automatic Sliding Fire Door Fixtures; Same as No 700, with Additional Counterbalance Weight for Closing, as Shown Above, Without Hangers and Track; Weight 106 Lbs. per Set $14.00

One Set in a Box

Per Set

No. 800A—Fixtures; Same as No. 800, except without Chafing Strips for Front and Rear, Reinforcing Strips and Steel Angles; Weight 85 Lbs. per Set..... $11.50

For Hangers and Track, See Page 227

End Bracket

Showing Type of Center Bracket used in No. 900

REVERSED HANGER, LEVEL SLIDE

Can be used with 4 in. of Head Room in Opening; With this Device the Track is brought outside of the Door and accommodation is provided for the Track Supports

Per Pair

No. 2—Hangers; Weight 20 Lbs. per Pair..... $4.20

No. 6—Double Adjustable Hangers; Weight 30 Lbs. per Pair..... 6.00

Per Foot

No. 9—Track, with Special Track Supports Every 2 Feet, Weight 4¼ Lbs per Foot $0.60

Each

No. 9E—End Track Supports or Brackets; Weight 2½ Lbs. Each..... $0.60

Per Set

No. 900—Automatic Sliding Fire Door Fixtures, with Additional Counterbalance Weight for Closing, Weight 109½ Lbs. per Set .. $14 00

One Set in a Box

Per Set

No. 900A—Automatic Sliding Fire Door Fixtures Complete, except Chafing Strips for Front and Rear and Reinforcing Strips and Steel Angles; Weight 91 Lbs. per Set..... $11.50

One Set in a Box

REPAIRS FOR SLIDING FIRE DOOR FIXTURES ON PREVIOUS PAGES

Each

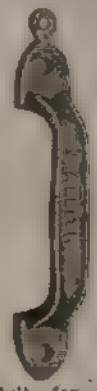
No. 304—Fusible Link, ½x1¾ in., with Hooks, Melts at 150 to 160 Degrees; Used on any Fire Doors or Shutters; Weight ½ Oz. Each.....$0.35

Each

No. 313—Steel Corner, Used Where Door Enters Keepers; Weight ⅜ Lb. Each $0.08

Each

No. 306—Flush Door Pull, for Inside Surface; 7¼x3¼x1⅛ in. Deep; Weight 1⅛ Lbs. Each.....$0.25



Each

No. 305—Door Pull, for Outside Surface; 7½ in. Long; Weight ¾ Lbs. Each $0.15

Each

No. 307—Upper and Lower Front Binder, for Sliding Door; Weight 4 Lbs. Each $0.70

Each

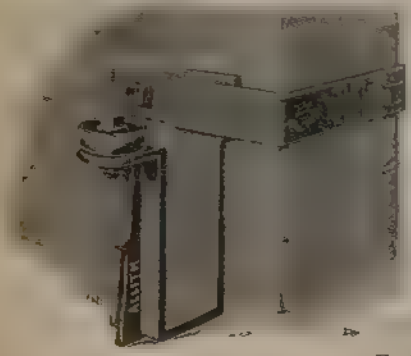
No. 328—Front Stop, for Sliding Door; Weight 3¼ Lbs. Each.....$0.60

Each

No. 329—Back Stop, for Sliding Door; Weight 1¾ Lbs. Each ..... $ 35

Each

No. 261HH—End Supports, for Sliding Door Track; Weight 1⅔ Lbs. Each.$0.50



Each

No. 364—Stay Roller, Guide and Binder, for Lower Edge of Door, Very Heavy Frame, 10x2½ in. $2.20

Weight 14¼ Lbs. Each

Each

No. 315—¾ in. Half Round Chafe Strip, Used Between Door and Wall, One-Third Way from Bottom to Top of Door $0.30

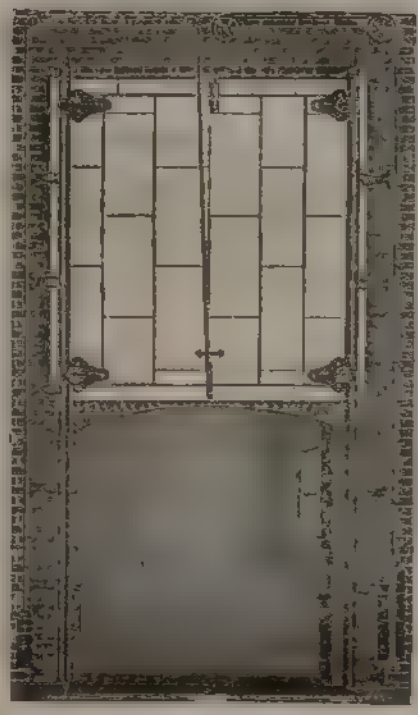
Weight ⅔ Lb. per Foot

Each

No. 316—Flat Steel Chafe Strip, for Stay Roller, 2¼ in. No. 14 Steel $0.35

Weight ½ Lb. per Foot

ALLITH DROP FIRE DOOR FIXTURES



UNDERWRITERS INSPECTED HARDWARE LABORATORIES

This Stamp Appears on All Our Sliding Doors and Fixtures

Insurance Regulations read, "Under special conditions, where horizontally sliding doors cannot be used, an automatic vertical drop door may be arranged."

The Track is 1¼ in. diam. steel tube, the regular Reliable pattern, with special brackets.

A Set of Fixtures consists of Three Pulleys, one Fusible Link and Bracket, Loop to Attach Rope, 20 ft. of Sash Cord and the 12 Lb. Counterweight shown on the Left Side.

The Heavy Weights to keep door from dropping accidentally or too fast, should be the same weight as the door, less 12 Lbs. These and the ⅜ or ½ in. Wire Rope to connect weights with top of door, are not furnished. In ordering these, give weight of door.

No. 2V —Track and Brackets. Per Ft. $0.25
Weight 2 Lbs. per Foot

No. 380 —Fixtures .....Per Set 12.00
Weight 94 Lbs. per Set

No. 386 —Heavy Weights.....Per Lb. .06

No. 2VE—Extra Brackets .....Each .50
Weight 2½ Lbs. Each

No. 261Y—Extra Hangers on Roller Guides .....Each 1.00
Weight 3¼ Lbs. Each

TIN COVERED FIRE DOORS

Prices on Specifications

Per Sq. Foot

3 Ply Door; 2⅛ in. Thick.....$1.00
Figure Weight at 7½ Lbs. per Square Foot

STEP LADDERS

Norway Pine Sides and Steps; Steel Top Fasteners; Steps Fastened with Cement Coated Nails

PIONEER

Without Shelf

Nos.	Length, Ft.	Weight, Lbs.	Each
306	5	12	$1.05
306	6	13	1.20
307	7	16	1.30
308	8	19	1.50

PERFECTION

With 8¼x10½ in. Shelf

Nos.	Length, Ft.	Weight, Lbs.	Each
205	5	13	$1.40
206	6	15	1.60
207	7	18	1 80
208	8	19	2 00

CRESCENT

With 8¼x10½ in. Shelf

Select Clear Norway Pine; Jointed Wrought Iron Braces; Steps 4 in. Wide, Mortised into Standard

Nos.	Length, Ft.	Weight, Lbs.	Each
106	6	21	$3 00
108	8	27	4.00
110	10	35	5 00
112	12	39	6.00

PAINTERS' STEP LADDERS

Selected Norway Pine; Steps secured front and back to Sides with Pressed Steel Corner Plates Back Standards heavily ironed at connecting points; Used as Ladder or Trestle; a 10 in. Plank will slide through any Step.

Nos.	Length, Ft.	Weight, Lbs.	Each
406	6	18	$2.40
407	7	21	2.80
408	8	24	3.20
410	10	30	4.00
412	12	36	4.80

PAINTERS' TRESTLES

Used as Ladder or Trestle by Painters, Paper Hangers and Carpenters

Norway Pine, Rock Elm Rungs, fastened at top with Hinge Bolt; Very substantially made; 1½x2¾ in. Sides; 18¾ in. Wide, Inside at Top.

Nos.	Length, Ft.	Wt., Each, Lbs.	Each
606	6	25	$4 80
608	8	32	6.40

EXTENSION LADDERS

Best Norway Pine, with Rock Elm Rungs, Malleable Iron Locks

The Roller Attachment enables the Upper Section to be raised and lowered much easier than by any other scheme.

Nos.	822	824	826	828	830
Length, Ft.	22	24	26	28	30
Weight, Lbs.	46	51	55	60	65
Each	$6 60	7.20	7.80	8.40	9 00

Nos.	832	834	836	838	840
Length, Ft.	32	34	36	38	40
Weight, Lbs.	70	75	80	85	90
Each	$9 60	10 20	10.80	11.40	12.00

ROPE EXTENSION LADDERS

Best Norway Pine, with Rock Elm Rungs, Malleable Iron Locks; Has a Roller and Rope Attachment which enables the user to raise and lower the Upper Section by means of the Malleable Iron Crank, as shown in Cut.

Nos.	724	730	732	736	740
Length, Ft.	24	30	32	36	40
Weight, Lbs.	21	65	70	80	90
Each	$8 00	9 50	10.00	11.50	12.30

SINGLE TAPER

Norway Pine Sides; Size 1½x2⅜ in.; Rock Elm Rungs

Nos.	912	914	916	918	920
Length, Ft.	12	14	16	18	20
Weight, Lbs.	22	27	32	35	41
Each	$2.40	2.80	3.20	3.60	4.00

LADDER JACKS

This Jack attaches to the Standard of the Ladder instead of the Rungs; Can be raised or lowered to any desired height or angle or reversed to either the outside or under side without removing the plank or Scaffolding from the Jack; Adjustable to any Standard make of Ladders; Will support 1000 Lbs. Per Pair

No. W18—Made of 1½x1½ in. Angle Steel $3.00

Weight 4½ Lbs. per Pair

MARSWELLS WASHING MACHINES

It is impossible for Marswells Washer to stop on a dead center on account of the ingenious arrangement of the Walking Beam Levers which operate the Main Gear Wheel beneath the Tub; Any Wringer can be used with these Tubs.

MARSWELLS VACUUM

The vacuum principle is acknowledged by all to be the proper one for use in a Washing Machine; This Machine is operated by a Lever on the side of the Tub, connected at the lower end to a large Gear Wheel which meshes with a small Cog attached to a large Fly Wheel mounted on a Roller Bearing and when once started revolves very rapidly and greatly lessens the strength required to run the Machine the work is done by three Vacuum Cups, 7 in. in Diam. and 2¾ in. Deep of Heavy Gauge Sheet Metal, Galvanized to prevent rust.

These Cups are mounted on a Three Arm Spider on the top of a Shaft connected to the large Gear Wheel which causes them to be raised and lowered at each revolution. These Cups exert the maximum amount of pressure on the clothes

On the downward stroke they force air and suds through the clothes; and on the upward rise, vacuum created draws the suds back through them again

The position of the Cups is changed at each stroke a complete circuit being made every eight strokes. This insures all the clothes being washed alike

There is not a single piece of machinery on the lid of the Machine,—when opening the Tub, the user does not have to lift a heavy weight of machinery also.

Each

No. 100—Diam. at Bottom 25 in., at Top 21 in., Depth 15 in.; Selected Southern Cypress, Varnished in Natural Color Extended Stave Legs. $17 50

No. 100P—Same as above, but with Tight and Loose Pulleys, for Gasoline Engine. 18 00

One in a Crate Weight 85 Lbs. Each

MARSWELLS HAND OPERATED

Guaranteed for Five Years

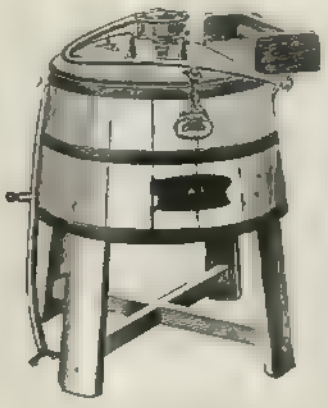
It will wash anything from a delicate lace curtain to a blanket, without wear or tear and with the least work on the part of the operator, Operator can run Washer in either a sitting or standing position; Only a slight push and pull of the Lever is needed to keep it in motion

Construction—All working parts which are subject to any strain are best Malleable Castings, and every Malleable or Casting is Sherardized, (Dry Galvanized) absolutely preventing rusting of parts, the Shaft which supports the Bearing rests on a Separator Bearing, thus eliminating all friction, the Hoops are first Galvanized and then Varnished, the small size and weight of Gears on top of the Machine make it easy to raise the Cover; the Legs are strongly braced; Every part of the Washer is smoothly finished and presents a handsome appearance; Large opening gives easy access to interior.

Each

No. 1—Diam. at Bottom 25 in., at Top 21 in., Depth 15 in.; Best Quality Cypress, Varnished; 14 in. Wringer Board $15 00

One in a Crate; Weight 100 Lbs. Each



MARSWELLS WATER MOTOR POWER

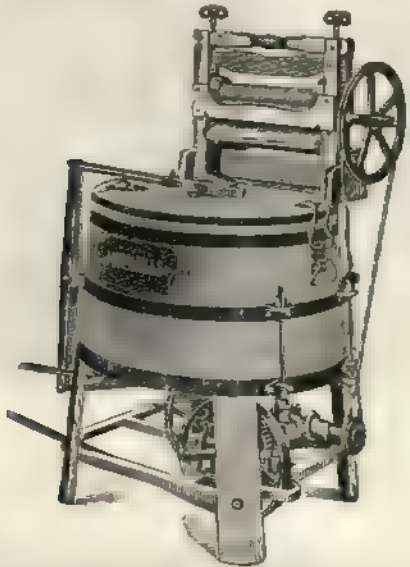
The Marswells is equipped with a Brass Water Motor and Hose to connect with Faucet and Sink. Four Gallons of Water per Minute discharge is necessary to run the Motor; Faucet flow should be tested before Hose is connected, Speed of Motor should not exceed 70 Strokes per Minute; Will wash linens in 7 Minutes and colored clothing, etc., in 12 to 15 Minutes.

Each

No. 2—Diam. of Tub at Bottom 25 in., at Top 21 in., Depth 15 in., Best Long Grained Cypress, Corrugated Inside; Legs Strongly Braced; Gold Bronzed Motor $21 50

One in a Crate

Weight 75 Lbs. Each



MARSWELLS; ENGINE OPERATED

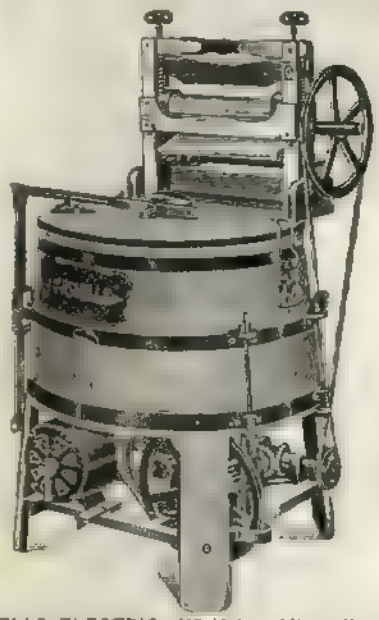
Each

No. 4—With 10x1¼ in. Belt Pulley to be operated with Gas or Gasoline Engine; Gears are so arranged that both Washer and Wringer can be operated at the same time or either can be operated independently $32 00

Weight 150 Lbs. Each

These Machines are of the same general construction as the Marswells High Speed shown above the Tub is best quality Cypress, Varnished, the Frame which contains the Gear is made of Steel, All working parts which are subject to strain are best Malleable Castings; All Metal parts are Sherardized (Dry Galvanized), preventing rusting of parts; Especial attention has been directed to bracing the Legs and other parts of the Machine, making the entire construction extremely rigid and substantial; the cost of operation is very low, the Machine is complete with Wringer, bearing a 5 year guarantee

Diam. of Tub at Bottom 25 in., at Top 21 in., Depth 15 in.



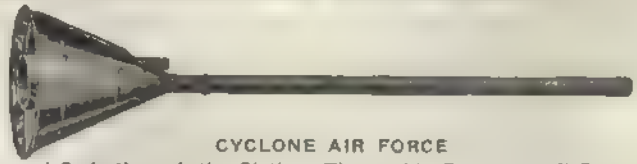
MARSWELLS ELECTRIC; 110 Volts; Alternating Current

Each

No. 3—One-sixth Horse Power Motor; Gears and Wringer can be operated at the same time, or either can be operated independently. Complete with Electric Wire and Plug to attach to Electric Light Socket $75.00

Weight 170 Lbs. Each

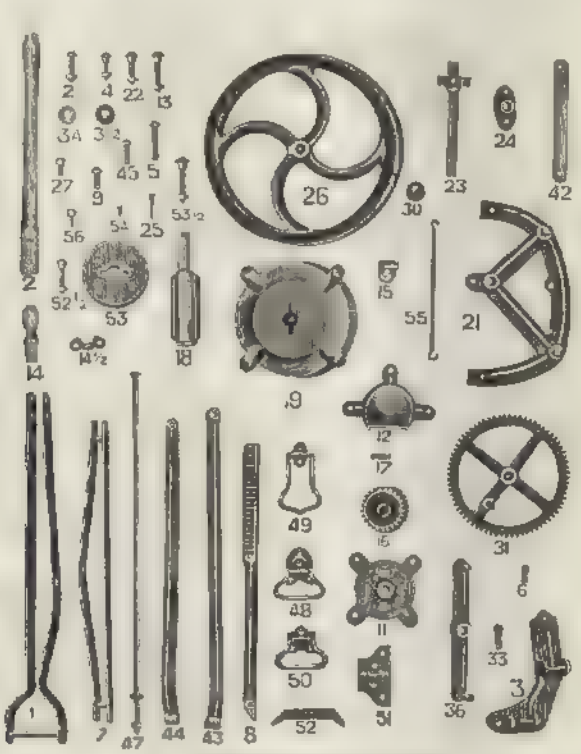
CLOTHES WASHERS



CYCLONE AIR FORCE

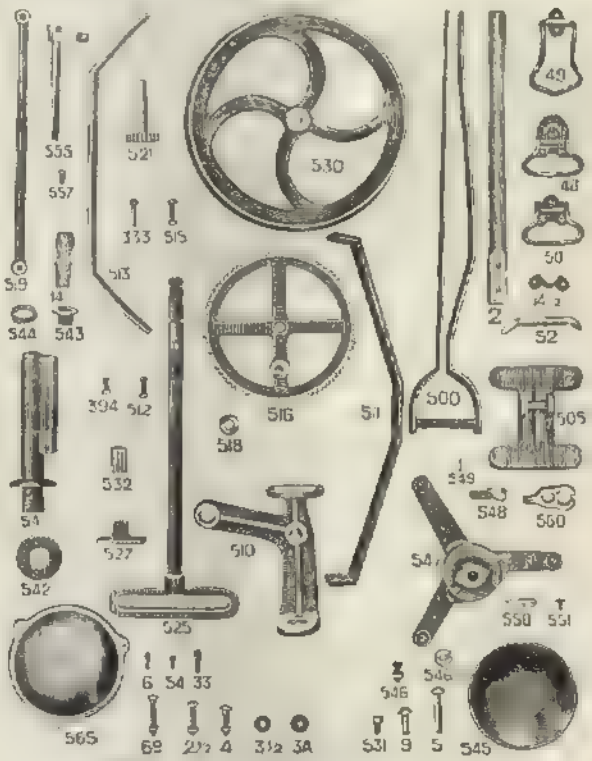
Forces Water and Suds through the Clothes, Thoroughly Removing all Dirt; Easily Operated

No. 10—Size of Cone 8½x8½ in., Heavy Ribbed Tin; 30 in. Hardwood Handle ... Per Dozen .$12 00
Open Stock, Weight 2 Lbs. Each



FOR MARSWELLS WASHERS

		Each
No. 1	—Lever Complete	$0.50
No. 2	—Lever Handle	.15
No. 2½	—Lever Handle Bolt and Nut	.05
No. 3	—Lever Bracket	.50
No. 3½	—Lever Bracket Bolt Washer, Steel	.02
No. 3A	—Lever Bracket Bolt Washer, Rubber	.05
No. 4	Lever Bracket Bolt and Nut	.05
No. 5	—Lever Bracket Clevis Pin	.02
No. 6	—Lever Bracket Clevis Pin Cotter	.01
No. 7	—Dolly Lever Complete	.50
No. 8	—Dolly Lever Rack	.35
No. 9	—Dolly Lever Clevis Pin	.02
No. 10	—Dolly Lever Rack Clevis Pin Cotter, same as No. 6	
No. 11	—Dolly Gear Bracket	.25
No. 12	[illegible]	
No. 13	—Dolly Gear Bracket Bolt and Nut	.05
No. 14	—Waste Plug	.05
No. 14½	—Waste Spout	.05
No. 15	—Dolly Lever Rack Guide	.10
No. 16	—Dolly Gear	.30
No. 17	—Dolly Gear Pin	.02
No. 18	—Dolly Shaft Complete	.35
No. 19	—Wood Dolly	.40
No. 21	—Lower Gear Bracket	1.00
No. 22	—Lower Gear Bracket Bolt and Nut	.05
No. 23	—Lower Gear Shaft Complete	.35
No. 24	Lower Gear Shaft Top Bracket	.10
No. 25	—Lower Gear Shaft Top Bracket Screw	.01
No. 26	—Lower Gear Fly Wheel	1.50
No. 27	Lower Gear Fly Wheel Set Screw	
No. 30	—Lower Gear Shaft Ball Bearing	.05
No. 31	[illegible]	
No. 33	[illegible] Gear Stud Cotter	
No. 35	—Lower Gear Cotter, same as No. 6	.01
No. 36	[illegible]	
No. 38	Lower Pitman Lever Cotter, same as No. 6	.01
No. 41	—Lower Pitman Lever Beam Connection Cotter, same as No. 6	.01
No. 42	—Lower Pitman	.10
No. 43	—Lower Lever Connection	.35
No. 45	[illegible] Clevis Pin	.02
No. 46	[illegible] same as No. 6	.01
No. 47	—Tub Tie Bolt, Nut and Washer	.02
No. 47½	—Tub Tie Bolt Washer	
No. 48	—Tub Handle, Lock Side	.10
No. 49	—Cover Catch	.14
No. 50	—Tub Handles	.10
No. 51	—Tub Hinge	.10
No. 52	—Wringer Board Bracket	.05
No. 52½	—Hinge Bolt and Nut	
No. 53	—Dolly Plate	.15
No. 53½	—Wringer Board Bolt and Nut	.05
No. 54	—Wringer Box Screw	.01
No. 55	—Balance Spring	
No. 56	—Balance Spring Screw Eye	.01
No. 57	—Tub Complete	6.00
No. 58	—Wringer Box	.40



FOR MARSWELLS VACUUM WASHERS

		Each
No. 2	—Wood Handle	$0.15
No. 2½	—Wood Bolt and Nut	.10
No. 2A	Rubber Washer	
No. 3½	—Lever Bracket Bolt Washer	.02
No. 4	—Lever Bracket Bolt Nut	.05
No. 5	—Lever Bracket Clevis Pin	.10
No. 6	—Lever Bracket Clevis Pin Cotter	
No. 9	—Dolly Lever Rack Clevis Pin	
No. 14	—Waste Plug	.05
No. 14½	—Waste Spout	.05
No. 33	—Lever Pitman Gear Stud Gear	.02
No. 48	—Tub Handle, Lock Side	.10
No. 49	—Cover Catch	.10
No. 50	—Tub Handles	.10
No. 52	—Wringer Board Bracket	.05
No. 54	—Wood Screw	
No. 69	[illegible] Bolt	.02
No. 333	Lever Pitman Gear Stud Cotter	.02
No. 394	Dolly Union Shifting Lever Bracket Screw and Nut	.05
No. 500	—Operating Lever	1.3
No. 505	—Lever Bracket	.7
No. 510	—Gear Bracket	1.25
No. 511	—Gear Bracket Support	.75
No. 512	—Gear Bracket Support Bolt and Nut	.05
No. 513	—Gear Bracket Support Tie Strap	.45
No. 515	—Gear Bracket Support Tie Strap Bolt	.05
No. 516	—Drive Gear	1.15
No. 518	—Drive Gear Pitman Stud and Washer	.02
No. 519	—Drive Gear Pitman	.70
No. 521	[illegible]	20
No. 525	[illegible]	50
No. 527	—Yoke Slide Block	.10
No. 530	Fly Wheel	1.85
No. 531	—Fly Wheel Set Screw	.05
No. 532	—Fly Wheel Roller Bearing	.35
No. 541	Vertical Shaft Sleeve	1.05
No. 542	—Vertical Shaft Rubber Washer	.10
No. 543	—Vertical Shaft Packing Nut	.10
No. 544	—Vertical Shaft Packing	.02
No. 546	—Vacuum Cup	1.00
No. 546	—Vacuum Cup Bolt	.05
No. 546½	—Vacuum Cup Bolt Washer	.02
No. 547	—Vacuum Cup Spider Complete	1.75
No. 548	—Vacuum Cup Spider Lock Lever	.05
No. 549	—Vacuum Cup Spider Lock Lever Pin	.02
No. 550	—Vacuum Cup Spider Lock Lever Catch	.05
No. 551	—Vacuum Cup Spider Lock Lever Catch Pin	.05
No. 555	—Index Shaft	.35
No. 557	—Index Shaft Support Set Screw	.05
No. 560	—Index Ratchet	
No. 565	[illegible] and Nut	1.15 .80

HAND OPERATED CLOTHES MANGLES

For Sheets, Pillow Slips, Table Cloths, Towels, Napkins and other articles which have no buttons

These Mangles turn very easily. About 35 turns of the Handle per minute gives a good Ironing Speed. The operator can turn the Handle and guide the clothes but best results are obtained if someone operates the Machine for her, leaving her both Hands free to guide the clothes. These Models are intended for Kitchen use where space is limited. They require no fastening. Can be easily moved by two persons.

26 AND 32 IN. MANGLES; HAND POWER

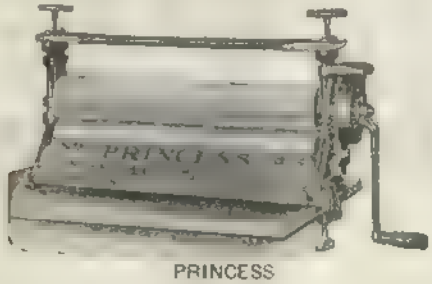
	Each
No. 126—26 in. Gas Heat, Weight 135 Lbs.	$60 00
No. 132—32 in. Gas Heat; Weight 142 Lbs.	70.00
No. 226—26 in. Gasoline Heat, Weight 135 Lbs.	60 00
No. 232—32 in. Gasoline Heat; Weight 143 Lbs.	70 00

24 IN. JUNIOR; HAND POWER

	Each
No. 124—24 in. Gas Heat; Weight 110 Lbs.	$50 00
No. 224—24 in. Gasoline Heat, Weight 110 Lbs.	50 00

24 IN. JUNIOR; BELT POWER

No. 324—24 in. Gas Heat, Weight 130 Lbs.	64 00
No. 424—24 in. Gasoline Heat; Weight 130 Lbs.	64 00



PRINCESS

For Family Use

NIAGARA

Each

No. 324P—24x3½ in. Hardwood Rolls; Ball Bearings; Heavy Tension, Enclosed Cog Wheels, Iron Frame, Painted Black. Clamp Opens 2 in.; Can be Clamped to any Table. $11.50
One in a Case; Weight 72 Lbs. Each

Each

No. 2—24x3½ in. Hardwood Rolls; Ball Bearings; Enclosed Steel Spiral Tension Springs, Adjustable Tension; Iron Frame, Painted; Screw Clamps for attaching to Table; Clamps Open 1¾ in. $9.50
One in a Case; Weight 60 Lbs. Each

GARLAND

Each

No. 25—24x5¼ in. Selected Hardwood Rolls; Two 28x11 in. Detachable, Hardwood Tables, 31½ in. Above Floor; Height Over-all 48 in.; Floor Space 41x27¼ in.; Easy Turning Purchase Gear; Gearing Covered with Shield; Malleable Iron Working Parts, Adjustable Tension, Spiral Steel Tension Springs; Japanned Iron Frame, Mounted on Casters. $42 00
One in a Crate, Weight 250 Lbs. Each

STEVENS REPEATING SHOT GUNS

HAMMERLESS, TAKE-DOWN, 6 SHOTS

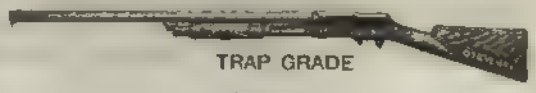
High pressure Compressed Forged Steel Barrel, Black Oxide Finish, bored for Nitro Powder, the Receiver is a Solid Drop Forging with no protruding Interior Parts, extra long Tangs to which the Stock is Fitted give added strength, Shells are Ejected at the side, away from the Shooter; The Safety is inside the Guard, in front of the Trigger and can be moved back and forth without removing the finger, this Gun can be fired as fast as it is possible for the Shooter to work the Slide Handle, without Clogging; the Locking Block is visible and the Gun cannot be discharged until it is Locked; the Firing Pin is drawn back and Locked on opening the Gun and stays Locked until the Gun is Closed; Can be taken down or put together in 8 Seconds; Rubber Butt Plate.

STANDARD GRADE

Walnut Pistol Grip Stock and Slide Handle; Length of Stock 13¾ in., Drop at Comb 1⅝ in., Drop at Heel 2⅝ in.; Barrels Full Choke Bored

	Each
No. 520—12 Gauge, 30 or 32 in. Barrel	$30 00

Weight 7¾ Lbs



TRAP GRADE

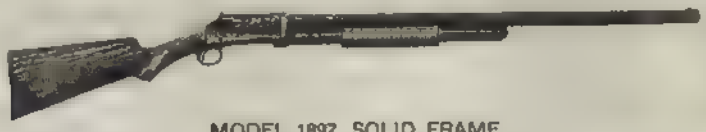
Straight

Fancy Checkered Walnut Stock and Slide Handle, Length of Stock 14 in., Drop at Heel 2¼ in., Drop at Comb 1½ in.; Barrel, Full Choke Bored, fitted with Hollow Matted Rib, which is particularly adapted to Shooters who have used a Double Barrel Gun and are accustomed to a continuous line of sight. It also prevents the reflection of light on the top of the Barrel from interfering with the Shooter's Sight. Trap Shooters especially find this feature helps to increase their score, Receiver has Matted top

	Each
*No. 522—12 Gauge, 30 in. Barrel	$45.00

Weight 7¾ Lbs. Each

WINCHESTER REPEATING SHOT GUNS



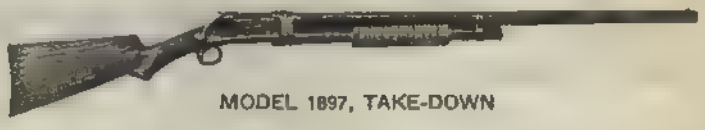
MODEL 1897, SOLID FRAME

The Action of Model 1897 Repeating Shot Gun is operated by the Sliding Fore-arm; one backward and forward movement will eject the empty shell, raise a loaded one from the Magazine into the Chamber, close and lock the Breech, cock the Hammer and make the Gun ready to fire again; Magazine is loaded from under side of frame

Rolled Steel Barrel, Full Choke Bored, Blued Steel Frame, Side Ejecting, Walnut Fore-arm, Pistol Grip, Walnut Stock 13⅞ in. long with 1¾ in. Drop at Comb and 2⅜ in Drop at Heel, Rubber Butt Plate; Holds 6 Shots

	Each
No. 972—12 Gauge, 30 or 32 in Barrel	$28 50

Weight 7½ Lbs. Each



MODEL 1897, TAKE-DOWN

This Gun can be taken apart and put together as easily as a double barreled shot gun, otherwise same as Solid Frame; 12 Gauge has 13⅞ in. Stock and will target 290 pellets of 7½ Chilled Shot in 30 in. circle at 40 yards, with ordinary loads of 1¼ oz. shot; 16 Gauge has 13⅜ in. stock and will target 240 pellets of 7½ Chilled Shot in 30 in. circle at 35 yards, with ordinary loads of 1 oz. shot

	Each
No. 9712—12 Gauge, 30 or 32 in. Barrel Full Choke	$31 00
No. 9716—16 Gauge, 28 in. Barrel Full Choke	31 00

Weights; 12 Ga., 7¾ Lbs. Each; 16 Ga., 7½ Lbs. Each

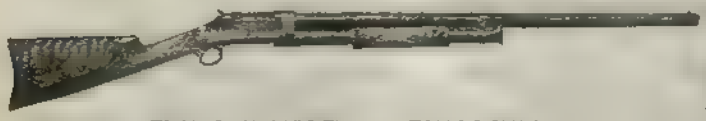
Model 1897 Guns 16 Gauge are Chambered for 2⅝ in. Shell; All others 2⅝ or 2¾ in.

For Component Parts, see page 2950

*Not Carried in Stock, Can Only be Furnished by Shipping Direct from Factory

For Cleaning Rods, see pages 3028–3032; Loaded Shells 2996–2999

WINCHESTER REPEATING SHOT GUNS



TRAP GUN, MODEL 1897, TAKE-DOWN

Rolled Steel Matted Barrel, Full Choke Bored; Blued Steel Frame Side Ejecting; Checkered Fore-arm and Straight Grip; Selected Walnut Stock 13¾ in. Long, with 1½ in. Drop at Comb and 2 ⅛ in. Drop at Heel; Checkered Rubber Butt Plate; Chambered for 2¾ in. Shells; Bored to target 290 pellets or over of 7½ Chilled Shot in a 30 in. Circle at 40 yards, with Load of 3¼ Drams Smokeless Powder, 1¼ oz. Shot; Holds 6 Shots

	Each
*No. 9712T—12 Gauge, 30 in. Barrel	$59.50

Weight 7¾ Lbs. Each

TOURNAMENT GUN, MODEL 1897, TAKE-DOWN

Rolled Steel Matted Barrel; Special Shaped Straight Grip Stock, 14 in. Long, with 1¾ in. Drop at Comb and 1⅝ in. Drop at Heel; Selected Walnut Checkered Fore-arm; Bored to target 290 pellets or over of 7½ Chilled Shot in a 30 in. Circle at 40 yards, with load of 3¼ drams smokeless powder, 1¼ oz. Shot; Holds 6 Shots.

	Each
*No. 9712TT—12 Gauge, 30 in. Barrel	$48.00

Weight 7¾ Lbs. Each

MODEL 1901, 10 GAUGE LEVER ACTION

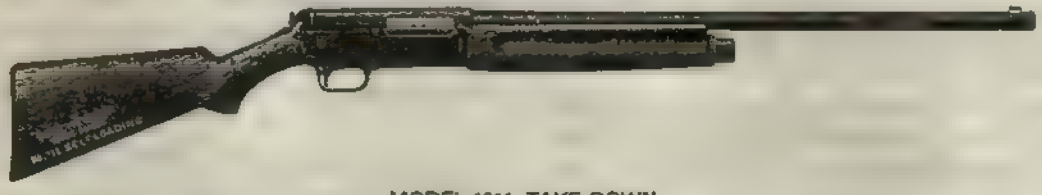
Particularly Adapted for Duck and Wild Fowl Shooting; One forward and backward throw of Lever will do the same work as the sliding movement of Forearm described on Model 1897

Rolled Steel Barrel, Full Choke Bored; Hardened and Browned Frame, Walnut Forearm, Pistol Grip; Walnut Stock 13 in. Long, with 2⅛ in. Drop at Heel and 1⅞ in. Drop at Comb; Steel Butt Plate. Holds 6 Shots.

	Each
No. 1901—10 Gauge, 32 in. Barrel	$34 50

Weight 8¾ Lbs. Each

WINCHESTER SELF-LOADING SHOT GUNS



MODEL 1911, TAKE-DOWN

12 Gauge, Recoil Operated, Hammerless, Take-Down, Five Shot Repeater; The Recoil developed by the Discharge of the Gun Cocks the Hammer, Ejects the Fired Shell, Feeds a Loaded Shell from the Magazine into the Chamber and leaves the Gun ready to be shot again. The distinctive features are: Nickel Steel Construction throughout; Receiver made with the Winchester patented "Bump of Strength" which gives the gun surpassing Strength and safety; Divided Recoil which minimizes the kick to the last degree, and a Reloading System which requires no readjustment for different loads Barrel Full Choke Bored, chambered for 2¾ in. Shells; Walnut Pistol Grip Stock, Handsomely Finished, 13¾ in. Long with 2⅜ in. Drop at Heel and 1⅝ in. Drop at Comb, Rubber Butt Plate; Receiver Blued and Matted on top along line of sight

	Each
No. W1911—12 Gauge, 28 in. Nickel Steel Barrel, Full Choke	$42.50

Weight 7¾ Lbs. Each

EXTRAS FOR MODEL 1897 SHOT GUNS

	Each
Fancy Walnut Stock and Fore-arm, not checked	$18 25
Checking Stock	6 25
Extra Length or Drop of Stock, to order	12 50
Fancy Checked Slide Hdle., Trap or Pigeon Gun Grade	6.25
Good, 3 Blade Damascus Barrel, in place of rolled steel barrel (additional)	18 75
Fine, 4 Blade Damascus Barrel, in place of rolled steel barrel (additional)	25 00
Matting Barrel	6.25

INTERCHANGEABLE BARRELS

	Each
Rolled Steel, complete with magazine and Fore-arm	$18.75
Rolled Steel, Trap Gun Grade, complete with magazine and fancy checked Fore-arm	25.00
Rolled Steel, Matted, Pigeon Gun Grade, complete with magazine and fancy checked Fore-arm	31 25
Good, 3 Blade Damascus, com. with mag. and Fore-arm	37.50
Fine, 4 Blade Damascus, com. with mag. and Fore-arm	43.75

Interchangeable Barrels—Interchangeable, Rolled Steel Barrels for the Take-Down Repeating Shotgun, complete with magazine, fore-arm, etc. can be furnished. In all cases, Extra Barrels will have to be fitted at Factory, as when furnished separately they are not strictly interchangeable; Model 1897 Shotguns with solid frame cannot be altered into "Take-Downs."

For Component Parts of Model 1897 Repeating Shotguns see Page 2950

For Cleaning Rods] see pages 3030-3032; Loaded Shells, 2996-2999

*Not Carried in Stock; Sold for Factory Shipment

WINCHESTER REPEATING SHOT GUNS

20 Gauge Hammerless Take-Down

There is an Increasing Demand for Small Gauge Shot Guns, because of their Light Weight, Ease of Operation, Light Recoil and Strong Shooting Qualities; The 20 Gauge Winchester is the very latest thing in Small Gauge Shot Guns and we offer it to our trade with the utmost confidence that it will fill every requirement.

We call special attention to the Handsome Appearance and graceful curves of this new Gun; there is not a Screw or Pin to be seen to mar its beauty or to collect dirt and grease.

MODEL 1912, 20 GAUGE WINCHESTER SHOT GUN

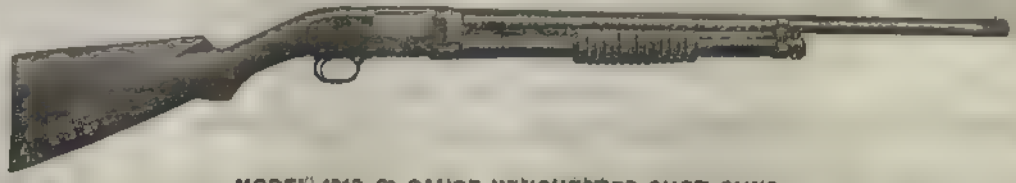
For Smokeless Powder

All Metal Parts are made of Nickel Steel which has Double the Breaking Strength of Ordinary Steel; Every Spring is made of High Tension Spring Wire which is very hard to break and will not take on a permanent set from use, the Receiver is made of Solid Nickel Steel, closed at the rear; this is the strongest construction possible, the Gun can be quickly and easily taken apart, the Stock and Action remaining in one part and the Barrel and Magazine in the other; No Tools are required and there are no small parts to become lost.

Length of Barrel 25 in., Chambered for 2½ in. Shells; Plain Walnut Pistol Grip Stock and Action Slide Handle; Length of Stock 13⅝ in., Drop at Comb 1½ in., Drop at Heel 2½ in.; Length Over-all 43½ in., Furnished either Full Choke Bore or Modified Choke Bore; Barrels are Interchangeable.

	Each
No. 1220 —6 Shots; Full Choke Bore; Will shoot at least 65% of the Shot Charges in a 30 in. Circle at 40 yards, with good pattern and penetration	$36 00
No. 1220M—6 Shots; Modified Choke Bore	36.00

Weight 5¾ Lbs. Each



MODEL 1912, 20 GAUGE WINCHESTER SHOT GUNS

	Each
No. 1220R—Full Choke Bore; with Raised Matted Rib Entire Length of Barrel; Otherwise same as above	$42.00

Weight 6 Lbs. Each

16 GAUGE HAMMERLESS TAKE DOWN

MODEL 1912, 16 GAUGE WINCHESTER SHOT GUN

This is one of the Lightest, Strongest and Finest Looking Repeaters made. It is perfectly proportioned, Handsomely Finished, and has no projecting Screws or Pins of any kind; it is made throughout of the same material and in the same careful manner as the 20 Gauge Guns described above.

Length of Barrel 26 in., Chambered for 2½ in. Shells; Plain Walnut Pistol Grip Stock and Action Slide Handle; Length of Stock 13⅝ in., Drop at Comb 1½ in., Drop at Heel 2½ in.; Length Over-all 44½ in., Rubber Butt Plate.

	Each
No. 1216 —Six Shots; Full Choke Bore; Will shoot at least 70% of the Shot Charge in a 30 in. Circle at 40 yards, with Good Pattern and Penetration	$36.00
No. 1216M—Six Shots; Modified Choke Bore	36 00
No. 1216R—Six Shots; Full Choke Bore; with Raised Matted Rib Entire Length of Barrel	42.00

Weight 6 Lbs. Each

WINCHESTER REPEATING SHOT GUNS

In order to make the Winchester Model 1912 Light without the sacrifice of strength, Nickel Steel, which has about double the strength of the Steel generally used in other makes of similar Guns, is used in the Barrel, Receiver and all the Working Parts of this Gun, except the Springs, which are made of High Tension Spring Wire, which is not apt to break or take on a permanent set from use. The Receiver is one piece, and is solid and entirely closed at the rear. No Screws or Pins extend through the walls of the Receiver, which is an added factor for strength and sightliness.

The Breech Bolt is short and solid; it has no joints to wear, and it will not buckle or get out of alignment; The breech Bolt, when in its rear-most position, is contained in the Receiver and does not run back into the wooden grip; this and the absence of side plates are added advantages; in the One-Piece Solid Breech Receiver of the Winchester Model 1912, any gases escaping rearward from a shell must pass out at the opening in the side of the Receiver.

MODEL 1912, 12 GAUGE HAMMERLESS TAKE DOWN

The Stock is perfectly proportioned and is made of Selected Walnut; with Rubber Butt Plate; Full Comb; Small, well rounded Grip, which fits the Hand Comfortably, the Action Slide Handle is a trifle shorter than on many Repeating Shot Guns, giving an especially pleasing appearance and fitting the hand nicely Each Gun is carefully targeted and tested before it leaves the Factory; the Action works easily and smoothly; the Shells are loaded into the Magazine through the bottom of the Receiver.

The Trigger Lock operates Cross-wise, which makes it impossible for it to be jarred out of place by the recoil; it is conveniently located in the outside front end of the Guard and is readily operated by the trigger finger; when the Lock is off and the Trigger can be pulled, the Lock shows a Red Band of Warning

6 Shots; Nickel Steel Barrel, Chambered for 2¾ in. Shells; Plain Walnut Grip Stock, Nicely Finished, Length 13¾ in.; Drop at Comb 1 11/16 in.; Drop at Heel 2½ in.; Rubber Butt Plate; Plain Walnut, Grooved Slide Handle

No. 1212 —Six Shots; Full Choke Bore; 30 or 32 in. Barrel; will shoot at least 70% of the Shot Charge in a 30 in. Circle at 40 Yards with a load of 3 drams of Smokeless Powder and 1¼ Oz. of No. 7½ Chilled Shot.	$36.00
No. 1212M—Six Shots; Modified Choke Bore, 30 in Barrel	36.00
No. 1212R—Six Shots; Full Choke Bore, 30 in. Barrel, with Raised Matted Rib Entire Length	42.00

Weight About 7¼ Lbs. Each

MODEL 1912, 12 GAUGE, TOURNAMENT GRADE

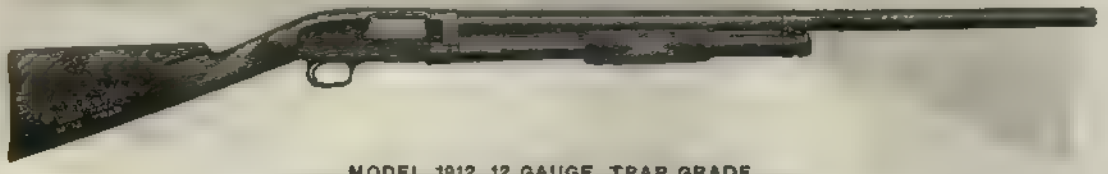
Hammerless Take Down

The Dimensions of this Gun have been carefully worked out to fit the Average Trap Shooters' requirements; the Comb is heavy and rounding, which is a help to Quick and Accurate Shooting and Minimizes Cross Sighting.

	Each
No. 1912T—6 Shots; Full Choke Bore, 30 in Nickel Steel Barrel, with Raised, Matted Rib; Chambered for 2¾ in. Shells; Selected Walnut Stock, Oil Finished, Straight Grip, Checked; Rubber Butt Plate Length of Pull 14 in., Drop at Comb 1 7/8 in., Drop at Heel 1¾ in.	$64.00

Weight About 7½ Lbs. Each

Note—We will furnish above Gun, made to order at an Extra Charge of $3.00, with Stock not more than 1 in Shorter than Standard



MODEL 1912, 12 GAUGE, TRAP GRADE

Hammerless Take Down

This Gun is made and finished with especial care; the Stock has the Popular Full Comb and Well Rounded Grip

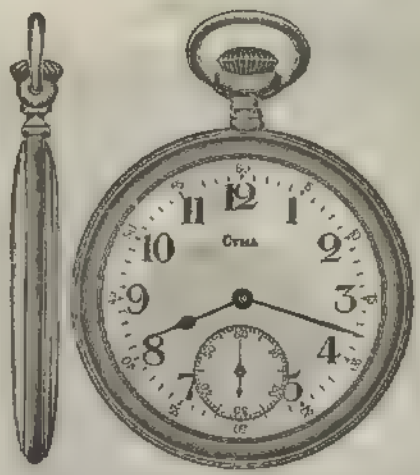
	Each
No. 1912TT—6 Shots; Full Choke Bore, 30 in. Nickel Steel Barrel, with Raised Matted Rib; Chambered for 2¾ in. Shells; Selected, Fancy Walnut Stock, Oil Finished; Straight Grip, Checked; Rubber Butt Plate; Length of Pull 13⅞ in., Drop at Comb 1⅞ in., Drop at Heel 1⅝ in.	$66.00

Weight About 7⅛ Lbs. Each

Note—We will furnish above Gun, made to order in any length of Stock desired, without extra charge

Interchangeable Barrels—Interchangeable, Nickel Steel Barrels for Model 1912, Repeating Shot Gun, Complete with Magazine, Fore Arm, etc., can be furnished; in all cases, Extra Barrels must be fitted at the Factory, as when furnished separately they are not strictly Interchangeable.

TAVANNES WATCHES



The Cyma Watch is an Accurate, Thin Model Time piece, Fully Guaranteed. Movement is Finely Finished and Jeweled throughout; Quick Train, Lever Escapement; Stem Wind and Pendant Set.

16 Size, Gold Dial, with Marginal Minutes

	Each
No. 188G—Gun Metal Case	$8 80
No. CG20—20 Year Gold Filled Case	15 00

16 Size, White Enamel Dial, with Marginal Minutes

	Each
No. 188—Gun Metal Case	$ 7.50
No. 184—Nickel Case	7.50
No. C20—20 Year Gold Filled Case	14.50

12 Size, White Enamel Dial, with Marginal Minutes

	Each
No. 290—Gun Metal Case	$7 50

Each

No. 336—12 Size, 15 Jewel Movement; Gun Metal Case with Gold Trimmings, Strikes Hours and Quarters. $30 00

WRIST WATCH

For Lady or Gentleman

For use by Automobilists, Prospectors, Aviators, Golfers, Hunters, Fishermen, Mounted Police, the Cavalry or any one requiring the time instantly. Watch is very Flat and does not interfere with Cuff or Sleeve.

O Size, Very Flat Thin Model Case, 7 Jewel Movement, Lever Escapement, Stem Wind and Pendant Set; Held by Leather Strap.

	Each
No. 87N Nickel Case	$15 00
No. 87G Gun Metal Case	15 00

Prices are for both Case and Movement

Each

No. 425-20—12 Size, Thin Model, 7 Jewel Movement; Plain Polished Gold Filled Case Guarantted for 20 Years. $15.00

NURSE'S WATCH

O Size; 7 Jewel Movement; Second Hand Runs continuously

	Each
No. NG—Gun Metal Case	$18 00
No. NS—Silver Case	21 50
No. N20—20 Year Gold Filled Case	20 80

O Size, Very Thin Model; Best Grade 7-Jewel Movement

No. 160B—Gun Metal Case	$14 00
No. 160B20—20 Year Gold Filled Case	17.70

HIGH GRADE WATCHES

LADIES'

These Watches are OO Size or smaller than O Size Watches and are sold complete only, fitted with high-grade 15 and 7 Jewel Tavannes Lever Movements all of which are absolutely guaranteed. The Watches are described as hunting cases, but where open face of the same pattern are required they will be $2.00 less for the Engraved and $1.26 less for the Plain or Engine Turned.

	Each
No. F-4207-15—With 15 Jewel Movement	$41 60
No. F-4207-7—With 7 Jewel Movement	35.10

	Each
No. F-4097-15—With 15 Jewel Movement	$41 60
No. F-4097-7 With 7 Jewel Movement	35.10

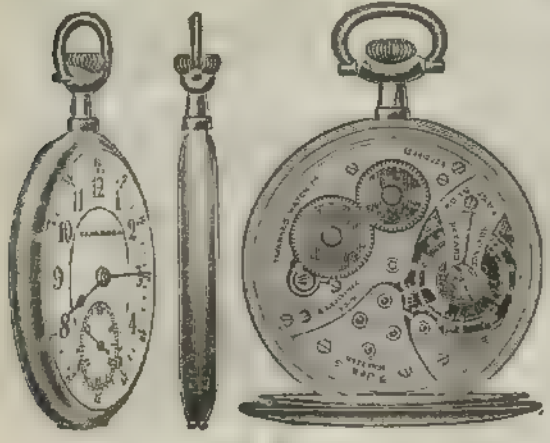
	Each
No F-4206-15—With 15 Jewel Movement	$41.60
No. F-4206-7—With 7 Jewel Movement..	35.10

	Each
No. F-3919-15—With 15 Jewel Movement	$41.60
No. F-3919-7—With 7 Jewel Movement.	35 10

	Each
No. F-228-15 With 15 Jewel Movement	$39 60
No. F-228-7—With 7 Jewel Movement...	33.20

	Each
No. F-226-15—With 15 Jewel Movement	$39 60
No. F-226-7—With 7 Jewel Movement...	33.20

MEN'S



12 SIZE, THIN MODEL

A new and scientific departure in the construction of a thin model or flat watch, making it possible to be guaranteed with perfect safety. It is a marvel in construction; it has no center wheel. The only very thin watch ever produced wherein the escapement and train possesses the freedom of the modern 12 and 16 size movements. It has long staff and pinions. The mainspring barrel is higher, thereby permitting a thinner and broader spring this allowing more space for the Breguet hair-spring.

12 Size 19 Ruby Jewels, 5 Adjustments, Cut compensating balance Breguet hair spring Double roller exposed pallets and steel escape wheel

	Each
No. 25P—25 Year Gold Filled Case	$56 50
No. 14P—14-K. Gold Plain Polished Case	101 50

Side View

Front View

	Each
No. 450—Men's Open Face Railroad Watch, 3 Oz. Solid Silverode Case, Stem Wind and Set, Fine Jeweled Movement, Engraved Locomotive Back; Porcelain Dial. A watch for Rough Service and Reliability. Dust and Moisture Proof..	$4.50

TAVANNES MOVEMENTS

All Nickel

TAVANNES Movements are made in the regular sizes for the American cases, and the general perfection and time-keeping qualities are just as evident in the smallest watch as in the largest. This general efficiency claimed for the TAVANNES Movements and Watches is made possible by the adequate automatic American machinery with which the factories are equipped, supplying the completely finished parts, all of which are duplicated to the fraction of a millimetre in their different sizes, and are constantly on hand, obviating necessity of delays caused by making new parts or their importation.

A Guarantee that is ABSOLUTE is back of all these products, and this Guarantee is just as it is claimed—ABSOLUTE.

16 SIZE

7 Jewels; Pendant setting; Adjusted to heat and cold; Exposed pallets; Compensating Balance; Breguet hair-spring; Double roller; Display winding work; Patent recoiling click and self-locking and setting device; Dust band and double sunk dial.

	Each
No. 155H—Hunting Case	$7.50
No. 155OF—Open Face	7.50

15 Jewels (3½ pairs) in Settings; Pendant setting; Adjusted to heat and cold; Exposed pallets; Compensating balance; Breguet hair-spring; Double roller; Display winding work; Patent recoiling click and self-locking and setting device; Dust band and double sunk dial

	Each
No. 157H—Bridge Model; Hunting Case	$15.00
No. 157OF—Bridge Model; Open Face	15.00

17 Jewels (4½ pairs) in Settings; Pendant setting; Adjusted to heat and cold; Exposed pallets; Compensating balance; Breguet hair-spring; Double roller, Display winding work; Patent recoiling click and self-locking and setting device, Dust band and double sunk dial.

	Each
No. 158H—Bridge Model; Hunting Case	$20 00
No. 158OF—Bridge Model; Open Face	20.00

12 SIZE

7 Jewels, Pendant setting; adjusted to heat and cold and non-magnetic; Exposed polished winding wheels; Exposed Pallets; Compensating balance; and setting device. Breguet hair-spring; Double Roller; Patent recoiling and self-locking

	Each
No. 425H—Hunting Case	$8 60
No. 425OF—Open Face	8 60

15 Jewels (3½ pairs) in Settings; Pendant setting; Adjusted to heat and cold, Exposed polished winding wheels Exposed pallets, Cut expansion balance, Breguet hair-spring, patent Micrometric regulator; Patent recoiling click and self-locking and setting device, Hard white enamel dial and dust band.

	Each
No. 427H—Hunting Case	$15 00
No. 427OF—Open Face	15 00

17 Jewels (4½ pairs) in Settings; Pendant setting; Bridge model; Adjusted to heat and cold and non-magnetic; Exposed pallets; Polished winding wheels. Breguet hair-spring Patent Micrometric regulator Patent recoiling click and self-locking and setting device

	Each
No. 428H—Hunting Case	$20 00
No. 428OF—Open Face	20.00

0 SIZE

7 Jewels; Pendant setting; Bridge model; Double roller; Compensating balance; Breguet hair-spring; Display winding work; Patent self-recoiling click and hard enamel dial.

	Each
No. 160H—Hunting Case	$10 00
No. 160OF—Open Face	10.00

15 Jewels (3½ pairs) in Settings; Pendant setting; Bridge model; Double roller; Compensating balance; Breguet hair-spring; Display winding work; Patent self-recoiling click and hard enamel dial.

	Each
No. 162H—Hunting Case	$17.00
No. 162OF—Open Face	17.00

17 Jewels (4½ pairs) in Settings; Pendant setting; Adjusted to heat and cold; Exposed pallets; Compensating balance; Breguet hair-spring; Double roller; Display winding work; Patent self-recording click and hard enamel Bridge.

	Each
No. 163H—Hunting Case	$24 00
No. 163OF—Open Face	24 00

For Cases for the Above Movements, See Pages 2758 to 2761

DESCRIPTION OF ELGIN MOVEMENTS

All Nickel

18 SIZE, THREE-QUARTER PLATE MODEL

VERITAS, 23 JEWEL — Each

Open Face, Lever Set, Pendant winding $80 00

Twenty-three Diamond, Ruby and Sapphire Jewels; Gold jewel settings; Barrel arbor pivots running in jewels; Double-roller escapement; Steel escape wheel; Poised pallet and fork; Exposed sapphire pallet stones; Pallet arbor cone-pivoted and cap-jeweled; Escape pinion cone-pivoted and cap-jeweled; Compensating balance, pivots running on diamonds; Breguet hair-spring, with Micrometric regulator; Adjusted to temperature, isochronism, five positions; Safety barrel, with spring box rigidly mounted on bridge Exposed winding wheels Patent recoiling click and self-locking setting device; Dust ring, Double-sunk glass enamel dial Engraving inlaid with gold, Plates beautifully damaskeened and finely finished.

VERITAS, 21 JEWEL

Pendant Winding	Each
Hunting Case, Lever Set	$72.00
Open Face, Lever Set	72.00

Twenty-one Diamond, Ruby and Sapphire Jewels, Gold jewel settings, Double-roller escapement, Steel escape wheel, Exposed Sapphire pallet stones, Pallet arbor cone-pivoted and cap-jeweled, Escape Pinion cone-pivoted and cap jeweled; Compensating balance, pivots running on diamonds; Breguet hair-spring, with Micrometric regulator, Adjusted to temperature, isochronism, five positions; Safety barrel, with spring box rigidly mounted on bridge, Exposed winding wheels, Patent recoiling click and self-locking setting device; Dust ring; Double-sunk glass enamel dial; Engraving inlaid with gold; Plates beautifully damaskeened and finely finished.

FATHER TIME

Pendant Winding	Each
Hunting Case, Lever Set	$62.00
Open Face, Lever Set	62.00

Twenty-one Diamond, Ruby and Sapphire Jewels; Gold jewel settings; Double-roller escapement; Steel escape wheel; Exposed sapphire pallet stones; Pallet arbor cone-pivoted and cap-jeweled; Escape pinion cone-pivoted and cap-jeweled; Compensating balance, pivots running on diamonds, Breguet hair-spring, with Micrometric regulator; Adjusted to temperature, isochronism, five positions; Safety barrel, with spring box rigidly mounted on bridge, Exposed winding wheels; Patent recoiling click and self-locking setting device; Dust ring; Double-sunk glass enamel dial; Engraving inlaid with gold, Plates beautifully damaskeened and finely finished.

B. W. RAYMOND, 19 JEWEL

Pendant Winding	Each
Open Face, Lever Set	$54 00

Nineteen Diamond, Ruby and Sapphire Jewels, Gold jewel settings; Barrel arbor pivots running in jewels Double-roller escapement, Steel escape wheel, Exposed sapphire pallet stones, Compensating balance, pivots running on diamonds; Breguet hair-spring, with Micrometric regulator; Adjusted to temperature, isochronism, five positions; Safety barrel, with spring box rigidly mounted on bridge; Exposed winding wheels; Patent recoiling click and self-locking setting device; Dust ring; Double-sunk glass enamel dial; Engraving inlaid with gold; Plates damaskeened and finely finished.

B. W. RAYMOND, 17 JEWEL

Pendant Winding	Each
Hunting Case, Lever Set	$50 00
Open Face, Lever Set	50 00

Seventeen Ruby and Sapphire Jewels; Gold jewel settings; Double-roller escapement; Steel escape wheel; Exposed sapphire pallet stones; Compensating balance; Breguet hair-spring, with Micrometric regulator; Adjusted to temperature, isochronism, five positions. Exposed winding wheels; Patent recoiling click and self-locking setting device; Dust ring; Double-sunk glass enamel dial; Engraving inlaid with gold. Plates damaskeened and finely finished.

18 SIZE, THREE-QUARTER PLATE MODEL

G. M. WHEELER

Pendant Winding	Each
Hunting Case, Lever Set	$34 00
Open Face, Lever Set	34 00

Seventeen Jewels (settings); Ruby and Sapphire balance and center jewels; Double-roller escapement; Steel escape wheel; Exposed pallet stones; Compensating balance; Breguet hair-spring, with Micrometric regulator; Adjusted to temperature, isochronism, three positions, Exposed winding wheels, Patent recoiling click and self-locking setting device Dust ring; Double-sunk glass enamel dial Plates damaskeened; Engraving inlaid with gold

18 SIZE, FULL PLATE MODEL

Pendant Winding	Each
No. 348—Hunting Case, Lever Set	$56 00
No. 349—Open Face, Lever Set	56 00

Twenty-one Ruby and Sapphire Jewels; Gold jewel settings; Double-roller escapement; Steel escape wheel; Exposed sapphire pallet stones; Pallet arbor cone-pivoted and cap-jeweled; Escape pinion cone-pivoted and cap-jeweled; Compensating balance; Breguet hair-spring, with Micrometric regulator; Adjusted to temperature, isochronism, five positions; Patent recoiling click; Dust ring; Double-sunk glass enamel dial; Engraving inlaid with gold; Plates damaskeened and finely finished.

Pendant Winding	Each
No. 378—Hunting Case, Lever Set	$19 20
No. 379—Open Face, Pendant Set	19.20

Seventeen Jewels (settings); Ruby and Sapphire balance and center jewels; Exposed pallet stones; Compensating balance; Breguet hair-spring, with Micrometric regulator; Adjusted to temperature; Dust ring; Depressed center sunk-second dial; Plates damaskeened.

Pendant Winding	Each
No. 335—Hunting Case, Lever Set	$14 70
No. 336—Open Face, Pendant Set	14.70

Pendant Winding

Seventeen Jewels (settings); Ruby and Sapphire balance and center jewels; Exposed pallet stones; Cut expansion balance; Breguet hair-spring, with Micrometric regulator, Dust ring; Depressed center sunk-second dial, Plates damaskeened

Pendant Winding	
No. 316—Hunting Case, Lever Set	$12.50
No. 317—Open Face, Pendant Set	12.50

Fifteen Jewels (settings); Ruby balance jewels Exposed pallet stones, Cut expansion balance, Breguet hair spring, with Micrometric regulator Dust ring, Sunk-second dial, Plates damaskeened.

	Each
No. 287—Hunting Case, Lever Set	$9.00
No. 288—Open Face, Pendant Set	9.00

Seven Jewels (settings); Ruby balance jewels Exposed pallet stones; Cut expansion balance, Breguet hair-spring, with polished oval regulator; Dust ring; Sunk-second dial; Plates damaskeened.

16 SIZE, THREE QUARTER PLATE MODEL

LORD ELGIN — Each

Open Face, Pendant Winding and Setting $160.00

Twenty-three Ruby and Sapphire Jewels; Gold Jewel Settings, Barrel arbor pivots running in jewels; Double-roller escapement; Steel escape wheel, Poised pallet and fork, Exposed ruby pallet stones; Pallet arbor cone-pivoted and cap-jeweled; Escape pinion cone-pivoted and cap-jeweled; Compensating balance; Breguet hair spring with Micrometric regulator, Adjusted to temperature, isochronism, five positions Safety barrel, with spring box rigidly mounted on bridge; Exposed winding wheels; Patent recoiling click and self-locking setting device; Dust ring; Double sunk glass enamel dial; Plates beautifully damaskeened, Closely timed and finely finished throughout. Each

No. 156—Hunting Case, Pendant Winding and Setting $140 00

16 SIZE, THREE-QUARTER PLATE MODEL

Each

No. 162—Open Face, Pendant Winding and Setting $140.00

Twenty-one Ruby and Sapphire Jewels; Gold jewel settings; Double-roller escapement; Steel escape wheel, Exposed ruby pallet stones; Pallet arbor cone-pivoted and cap-jeweled; Escape pinion cone-pivoted and cap jeweled; Compensating balance; Breguet hair-spring, with Micrometric regulator; Adjusted to temperature, isochronism, five positions; Exposed winding wheels; Patent recoiling click and self-locking setting device; Dust ring; Double-sunk glass enamel dial; Plates beautifully damaskeened and finely finished.

VERITAS, 23 JEWEL — Each

Open Face, Lever Set, Pendant Winding $80.00

Same description as 18 Size Veritas, 23 Jewel, described on this page.

VERITAS, 21 JEWEL

Pendant Winding	Each
Open Face, Lever Set	$72.00

Same description as 18 Size Veritas, 21 Jewel, described on this page.

FATHER TIME, 21 JEWEL

Pendant Winding	Each
Hunting Case, Lever Set	$62 00
Open Face, Lever Set	62.00

Same description as 18 Size Father Time, 21 Jewel, described on this page.

B. W. RAYMOND, 19 JEWEL

Pendant Winding	Each
Hunting Case, Lever Set	$54 00
Open Face, Lever Set	54 00

Same description as 18 Size B. W. Raymond, 19 Jewel, described on this page.

G. M. WHEELER, 17 JEWEL

Pendant Winding	Each
Hunting Case, Pendant Set	$34 00
Open Face, Pendant Set	34 00

Same description as 18 Size, G. M. Wheeler, 17 Jewel, described on this page.

Each	
No. 381—Hunting Case, Pendant Set	$23.70
No. 382—Open Face, Pendant Set	23 70

Seventeen Jewels (settings); Ruby and sapphire balance and center jewels; Adjusted to temperature; Exposed pallet stones; Compensating balance, Breguet hair-spring, with Micrometric regulator; Exposed winding wheels; Patent recoiling click and self-locking setting device; Depressed center sunk-second dial; Dust ring; Damaskeened plates.

Each	
No. 386—Hunting Case, Pendant Set	$21.50
No. 387—Open Face, Pendant Set	21.50

Seventeen Jewels (settings); Ruby and sapphire balance and center jewels, Exposed pallet stones; Cut expansion balance; Breguet hair-spring, with Micrometric regulator; Exposed winding wheels; Patent recoiling click and self-locking setting device; Depressed center sunk-second dial; Dust ring; Damaskeened plates.

Pendant Winding	Each
No. 312—Hunting Case, Pendant Set	$17.00
No. 313—Open Face, Pendant Set	17.00

Fifteen Jewels (settings); Ruby balance jewels Exposed pallet stones Cut expansion balance; Breguet hair spring with Micrometric regulator; Exposed winding wheels, Patent recoiling click and self-locking setting device, Dust ring; Sunk-second dial; Plates damaskeened.

Pendant Winding	Each
No. 290—Hunting Case, Pendant Set	$10 70
No. 291—Open Face, Pendant Set	10 70

Seven Jewels (settings); Ruby balance jewels; Exposed pallet stones; Cut expansion balance; Breguet hair-spring, with polished regulator; Exposed winding wheels; Patent recoiling click and self-locking setting device; Dust ring; Sunk-second dial; Plates damaskeened.

For Cases for above Movements, See Pages 2758 to 2761

TEA BALL TEA POTS

The tea leaves are placed in the Tea Ball which is drawn up into the Cover and the Pot is Filled with freshly boiled water. The Tea Ball is lowered into the water and allowed to remain there three or four minutes. Then as the pouring spout will pass through the Cover and secured again. Perfect Tea is made in this way only

UNIVERSAL, COPPER

Made of Copper, Heavily Coated on the Inside with Pure Tin, Diameter 6 in., Height 6⅜ in. Capacity 6 Cups.

	Each
No. 300N Nickel Plated	$6 50
No. 300C Polished Copper	6 50

One in a Box; Weight 6 Lbs. Each

UNIVERSAL, ALUMINUM

Each

No. 400—Aluminum, Octagon Pattern, Rubberoid Handle, Diameter 5⅛ in., Height 8½ in., Capacity 6 Cups. . . $4.00

One in a Box; Weight 2 Lbs. Each

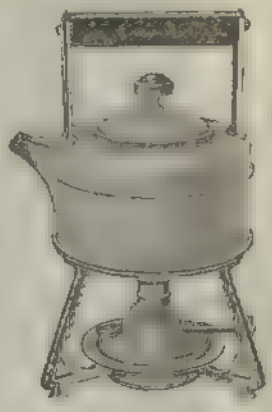
UNIVERSAL ALUMINUM

Each

No. 200—Aluminum with Rubberoid Handle, Diameter 5⅛ in., Height 8⅛ in., Capacity 6 Cups. $3 50

One in a Box; Weight 2 Lbs. Each

TABLE KETTLES



With Alcohol Lamp

The Lamp burns with a Hot Blue Flame; it is easily lighted or extinguished and can be perfectly regulated.

	Each
No. 4751 Nickel Plated, Satin Finish, Ebonoid Handle; Capacity 3 Pints; Height 12¾ in.; Complete with Kettle, Stand and Lamp	$9 25

One in a Box; Weight 5 Lbs.

	Each
No. 4749 Copper, Satin Finish; Ebonoid Handle; Capacity 2½ Pints Height 11¼ in.; Complete with Kettle, Stand and Lamp	$8 25

One in a Box; Weight 4 Lbs.

With Alcohol Lamp

The Lamp burns with a Hot, Blue Flame; it is easily lighted or extinguished and can be perfectly regulated.

	Each
No. 4750—Brass, Satin Finish; Ebonoid Handle; Capacity 3 Pints; Height 11 in.; Complete with Kettle, Stand and Lamp	$8 50

One in a Box; Weight 5 Lbs.

With Asbestos Force Draught Lamp

The Extinguisher, with its down over the Lamp has a Small Opening with a hinged Lid or Cap; when the Lamp is operated by placing the Extinguisher over Lamp, with Cap thrown back from small opening; Gives intense heat when wide open.

Ebonoid Handle; Capacity 2 Pints; Height 11 in.; Complete with Kettle, Stand and Lamp

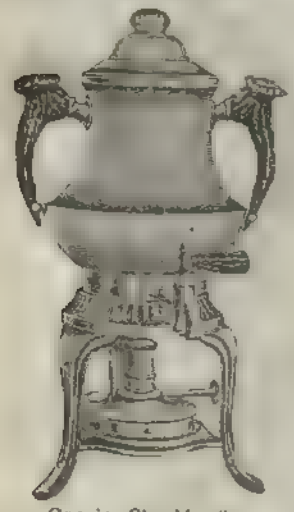
	Each
No. 4885N—Nickel Plated, Satin Finish	$2 90
No. 4885B—Brass, Satin Finish	2 30

One in a Box; Weight 2¼ Lbs. Each

UNIVERSAL COFFEE PERCOLATING MACHINES

Complete with Alcohol Vapor Lamp; Constructed upon same principle as the Universal Percolator. Seamless Copper Body, Coated with Tin Inside. The Cup, Spreader Plate, Tube and Valve are Pure Aluminum, which does not rust nor corrode, Glass Dome Top, Lever Handle Faucet, Side Handles; Body and Base are inseparable.

Especial attention is called to our new pattern of cup for holding the Ground Coffee, perforated on the bottom and on the sides, as well as to the Spreader Plate, by the construction of which the water falls through the little holes uniformly upon the Ground Coffee. This Percolating Apparatus clarifies the Coffee perfectly without use of eggs; extracts all that is good, separates the rest



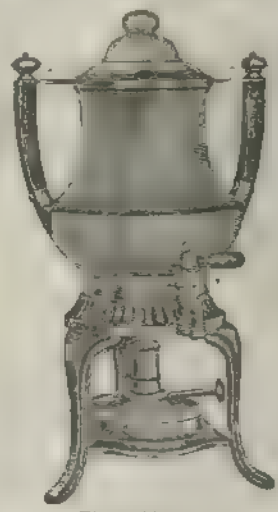
Genuine Stag Handles

NICKEL PLATED COPPER

Nos.	0366N	0369N
Cap., Cups.	6	9
Diam., In.	5	6
Height, In.	12½	15
Wt. Ea., Lbs.	10	12
Each.	$20.00	32.00

POLISHED COPPER

Nos.	0366C	0369C
Cap., Cups.	6	9
Each	$32.00	34 00



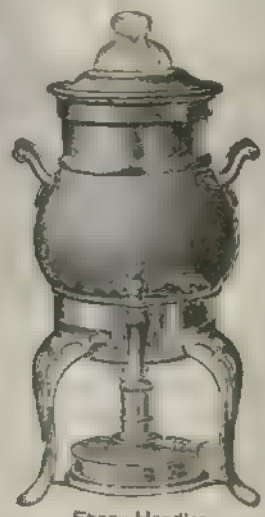
Ebony Handles

NICKEL PLATED COPPER

Nos.	366N	369N
Cap., Cups.	6	9
Diam., In.	5	6
Height, In.	12½	15
Wt. Ea., Lbs.	10	12
Each	$23.00	25.00

POLISHED COPPER

Nos.	366C	369C
Cap., Cups.	6	9
Each	$25.00	27.00



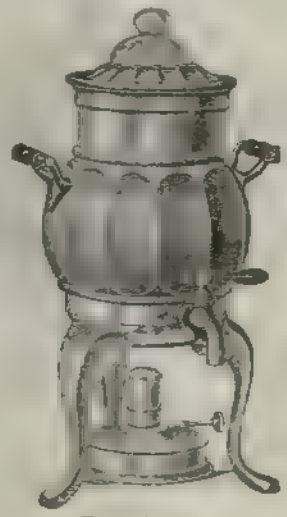
Ebony Handles

NICKEL PLATED COPPER

Nos.	006N	009N
Cap., Cups.	6	9
Diam., In.	5¼	6
Height, In.	13½	15
Wt., Each, Lbs.	11	12
Each	$10.50	11.75

POLISHED COPPER

Nos.	006C	009C
Cap., Cups.	6	9
Each	$10.50	11.75



Ebony Handles

NICKEL PLATED COPPER

Nos.	406N	409N
Cap., Cups.	6	9
Diam., In.	5¼	6
Height, In.	13¼	15
Weight, Each, Lbs.	11	12
Each	$13 75	15.00

POLISHED COPPER

Nos.	406C	409C
Cap., Cups.	6	9
Each	$13.75	15.00

One in a Box

Extra Glass Tops, for Universal Percolators. Weight 2 Lbs. per Dozen — Per Dozen $3 00

TEA SAMOVARS

Metal Handles

NICKEL PLATED COPPER

Nos.	6406N	6409N
Capacity, Cups	6	9
Diam., In.	5	6
Height, In.	15¼	16½
Weight, Lbs.	8¼	9½
Each	$16 50	17 75

POLISHED COPPER

Nos.	6406C	6409C
Capacity, Cups	6	9
Each	$16.50	17 75

One in a Box

Ebony Handles

NICKEL PLATED COPPER

Nos.	226N	229N
Capacity, Cups	6	9
Diam., In.	5	6
Height, In.	13½	15
Weight, Lbs.	11	12
Each	$8 50	9 75

POLISHED COPPER

Nos.	226C	229C
Capacity, Cups	6	9
Each	$8 50	9 75

One in a Box

UNIVERSAL

When the water is heated the Tea Ball containing the dry Tea is lowered into the water; when the Tea is of the required strength the Tea Ball is raised.

Made of Copper. Heavily coated on Inside with Pure Tin; Height 13½ in., Diam 7 in.; Capacity 6 Cups; will boil a Quart of Water in 6 Minutes

	Each
No. 606C—Polished Copper	$11.25
No. 606N—Nickel Plated Copper	11.25

Weight 10 Lbs. Each

One in a Box, with Full Directions for Operating

UNIVERSAL COFFEE PERCOLATORS

ALUMINUM; EMPIRE PATTERN

Highly Polished Seamless Body; Clear Glass Top; Enameled Wood Handle, Aluminum Strainer Cup and Tube; Complete with Extra Steel Stove Plate

Nos.	74	76	79	714
Capacity, Cups	4	6	9	14
Diameter Bowl, In.	4¼	4¾	5⅛	6
Height, In.	8	9	10	11
Weight, Dozen, Lbs.	64	74	82	98
Each	$4 50	5 00	5 50	6 00

Highly Polished, Seamless Body, Inside Coated with Pure Tin, Ebony Handle; Aluminum Strainer Cup and Tube; Clear Glass Top

ALUMINUM; OCTAGON PATTERN

Nos.	486	489
Capacity, Cups	6	9
Diameter Bowl, In.	5½	6
Height, In.	8¼	8¾
Weight, Dozen, Lbs.	56	66
Each	$5 00	5 50

ALUMINUM; OCTAGON PATTERN

Nos.	476	479
Capacity, Cups	6	9
Diameter Bowl, In.	5½	6⅞
Height, In.	9½	10
Weight, Dozen, Lbs.	64	70
Each	$5 50	6 00

ALUMINUM, ROUND PATTERN

Highly Polished Seamless Body; Inside Coated with Pure Tin, Ebonized Handle

Nos.	86	89
Capacity, Cups	6	9
Diam Bowl In.	4¾	5¼
Height, In	8¼	9
Weight Dozen, Lbs.	38	44
Each	$3.75	4.25

COPPER; LOW PATTERN

Nickel Plated Copper Body and Cover; Aluminum Base Plate Valve Tube Filter Cup and Spreader Plate Ebonwood Handle

Nos.	56	58	510
Capacity, Cups	6	8	10
Diameter In.	5½	5¾	6
Height In	8¼	9	9¾
Weight, Dozen, Lbs.	39½	46½	48
Each	$4.00	4.50	5.00

COPPER; OCTAGON PATTERN

Nickel Plated; Inside Coated with Pure Tin, Ebony Handle, Clear Glass Top.

Nos.	786	789
Capacity, Cups	6	9
Diameter Bowl In.	5½	6
Height, In	10½	11
Weight, Dozen, Lbs.	60	72
Each	$9.25	10.25

All Above, One in a Carton

ROME COFFEE PERCOLATORS

COPPER; TAPER PATTERN

Nickel Plated Copper Body and Cover; Aluminum Base Plate, Valve Tube, Filter Cup and Spreader Plate; Ebonized Handle.

Nos.	46	48	410
Capacity, Cups	6	8	10
Diameter, In	5⅜	5¾	6
Height, In.	8¾	9¼	10
Weight, Dozen, Lbs.	42	44	48
Each	$3 75	4 25	4 75

COPPER; LOW PATTERN

Made of 18 Oz. Copper; Ebonized Wood Handle, Pot is Tinned Inside and Nickel Plated Outside Highly Finished

Nos.	2023	2024	2026
Capacity, Cups	4	6	9
Diam Bowl, In.	4⅝	5	5½
Height, In.	7½	7⅞	9¼
Weight Dozen, Lbs.	36	42	48
Each	$4 50	5 00	6 00

COPPER; TAPER PATTERN

Made of 14 Oz. Copper; Enameled Wood Handle, Pot is Tinned Inside and Nickel Plated Outside, Highly Finished

Nos	1223	1224	1225
Capacity, Cups	4	6	9
Diam Bowl, In	3½	4	4
Height, In.	8½	9	10⅝
Weight Dozen Lbs	36	38	40
Each	$3 50	4 00	4 50

One in a Box; Three in a Carton

COFFEE, TEA AND WATER URNS

COFFEE AND HOT WATER

Heavy Copper, Nickel Plated and Highly Polished Outside, Heavily Tinned Inside with Pure Block Tin; Fixed Base; Lever Handle Clean-Out Faucets for Both Coffee and Water. One Gauge shows amount of Coffee in Urn; the other indicates height of Water surrounding the vitrified Stone Coffee Reservoir (between it and the Outer Shell); Cotton Fabric Filter

Nos.	2004	2006	2008	2010
Gallons	4	6	8	10
Size, In.	32½x13	37½x14¾	39½x15½	40x17
Wt. Ea. Lbs.	100	125	150	200
Each	$70.00	80.00	90.00	95.00

One in a Box

COFFEE OR TEA

Heavy Copper, Nickel Plated and Highly Polished; Heavily Tinned Inside With Pure Block Tin, Satin Finish; Base is fixed to Body; Lever Handle Clean-Out Gauge With Screw Clamp; Cotton Fabric Coffee Filter.

Nos.	2202	2204
Gallons	3	4
Size, In.	22x9	24x10½
Wt. Ea., Lbs.	25	
Each	$20.00	25.00

One in a Box

BARBERS HOT WATER

Heavy Copper; Nickel Plated Outside, Tinned Inside, Flat Bottom; Tee Handled Faucet; The most practical manner of heating water and keeping it hot in the small Shop; Often used in private families in place of Tea Kettle, with any kind of heating apparatus or placed on Stove or Range like a Kettle.

Nos.	3052	3053
Gallons	2	3
Size, In.	12½x7½	14x8
Wt. Ea., Lbs.	11	14
Each	$4.75	6.00

One in a Package

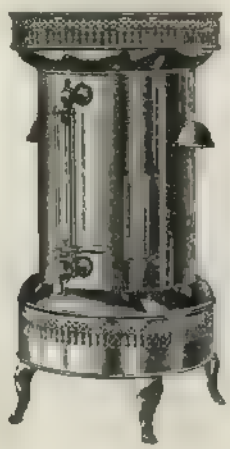
HOT WATER OR BAR

Heavy Copper, Nickel Plated and Polished; To be Heated with Alcohol or Gasoline Lamp, Gas or Steam. Tumbler Warming Rack on Top.

With Ornament on Top, Thermometer for Temperature, Gauge to show Level of Water, Lever Handle Faucet and Tumbler Rack; Sizes given include Ornament.

Nos.	2023	2024
Gallons	3	
Size, In.	34x8¾	36x10
Weight Each, Lbs.	40	45
Each	$20 00	25 00

One in a Package

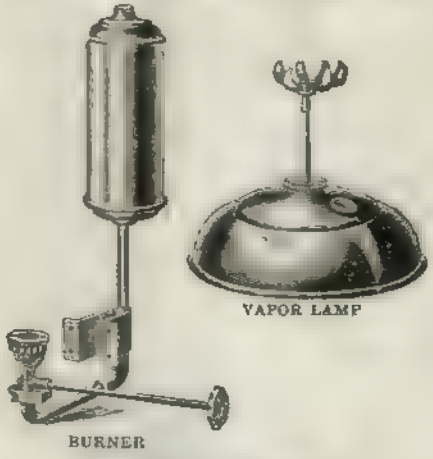


With Thermometer for Temperature, Gauge to show Level of Water, Lever Handle Faucet and Tumbler Rack.

Nos.	2072	2073
Gallons	2	3
Size, In.	21½x8	23x8¾
Weight Each, Lbs.	25	28
Each	$13.50	15.00

One in a Package

GASOLINE URN HEATERS



VAPOR LAMP

BURNER

GASOLINE BURNERS

	Each
No. 0—Nickel Plated Tank, Size 6¾x3½ in., Capacity 1 Quart; Length Over-all, 19 in., Nickel Plated Upright Pipe, Black Iron Horizontal Arm, 8¾ in. Long, with 2⅜ in Upturn at Valve, 6 in Valve Stem, Brass and Bronze Burner, Nickel Plated Support	$4 50

One in a Bundle; Weight 1¾ Lbs. Each

GASOLINE VAPOR LAMPS

	Each
No. 10—6 Jet Burner, Nickel Plated Copper Fount, Brass Burner with Wick; Diam. of Base 6⅛ in., 5½ in. High	$2.70

One in a Package; Weight 6 Lbs. Dozen

EXTRAS

	Per Dozen
Burner, Complete, with Wick, Weight 1 Lb. per Dozen	$7.00
Burner Tip, Weight 2 Oz. per Dozen	3 50

One Dozen in a Box

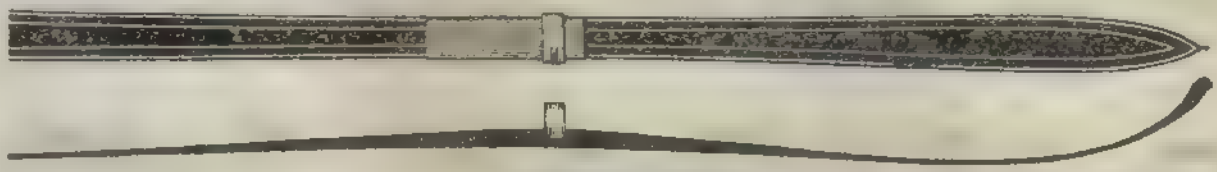
TELMARK SKIS

Manufactured by Expert Norwegian Ski Makers, the shapes are adapted for all snow conditions; the Wood is carefully selected, thoroughly seasoned and air dried. This treatment insures great Strength and sufficient Spring for Jumping.

Adjustable Metal Stirrup

Showing Patent Adjustable Metal Stirrup and Leather Toe Strap now supplied on all Telmark Skis (except Nos. PE76 and PE8) from cheapest to the best; Can be adjusted to any shoe; Gives perfect control of the Ski and is far superior to the ordinary leather strap.

Leather Toe Strap

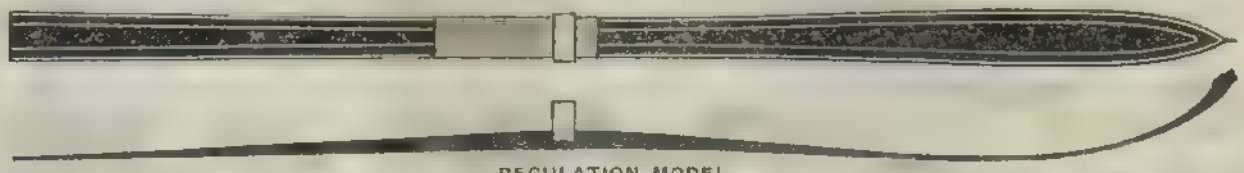


PROFESSIONAL MODEL

Very Latest Norwegian Design, specially suited for Ski Racing and Jumping; have corrugated Rubber Foot Rest to prevent feet from slipping, are finished in Black with Fancy Grooved White Stripe with one coat of Wood Filler and two coats of Shellac and Waterproof Varnish; Three Grooves on Bottom.

With Patent Adjustable Bindings	Per Pair	With Expert Binding No. E200	Per Pair
No. P76—7½ ft. Selected Hickory	$6.00	No. PE76—7½ ft. Selected Hickory	$9.00
No. P8—8 ft. Selected Hickory	7.00	No. PE8—8 ft. Selected Hickory	10.00

Open Stock; Weight About 10 Lbs. per Pair



REGULATION MODEL

Designed after the Professional Model and contains its shapely features, Are suitable to Cruising and all kinds of Ski Sport, Fitted with Patent Adjustable Leather and Metal Toe Strap Bindings, Corrugated Rubber Foot Rest prevents feet from slipping, Finished with one coat of Wood Filler and two Coats of Shellac and Waterproof Varnish Ornamented with Carved Stripes; Grooved Bottom.

White Ash, Black Finish	Per Pair	Maple, Mahogany Finish	Per Pair
No. RA7—7 ft. Long	$5 00	No. RB5—5 ft. Long	$2 50
No. RA76—7½ ft. Long	5 50	No. RB6—6 ft. Long	3 00
No. RA8—8 ft. Long	6 00	No. RB66—6½ ft. Long	3 25
		No. RB7—7 ft. Long	3 50
		No. RB76—7½ ft. Long	4 75

Open Stock; Weight 8 Lbs. per Pair

TELMARK MODEL

Made of the highest grade Quarter-Sawed Louisiana Yellow Pine and is Guaranteed Edge Grain which makes it absolutely Sliver Proof Material is strong and hard making the running surface very Smooth, Finished with Shellac and Waterproof Varnish in the Natural Wood; Ornamented with Stripes, Fitted with Patent Adjustable Leather and Metal Toe Strap Bindings Rubber Foot Rest Grooved Bottom.

Nos.	15	16	17	18
Length, Ft.	5	6	7	8
Per Pair	$2.00	2.25	2.50	3.00

Open Stock; Average Weight About 6 Lbs. per Pair

AMATEUR MODEL

Selected Norway Pine; Fitted with Patent Adjustable Leather and Metal Toe Strap Bindings, Rubber Foot Rests Finished in Natural Wood with several coats of Oil and Waterproof Varnish; Fancy Grooved White Stripes; Grooved Bottom.

Nos	A3	A4	A5	A6	A7	A76	A8
Length, Ft.	3	4	5	6	7	7½	8
Weight Pair, Lbs.	2½	3	3	4	6	7	7
Per Dozen Pairs	$14.00	15.00	18.00	21.00	27.00	30.00	33.00

Open Stock

SKI PUSH STICKS

	Per Pair
No. 60—Bamboo, 6 ft. Long, Rattan Cups; Steel Point Set in Ferruled End; Rawhide Wrist Strap	$2 00

SKI BINDINGS

EXPERT

	Per Pair
No. E200 — Leather Harness with Metal Side Plates attached by means of Two Bolts passing through the Ski This gives a Rigid and Perfect control of Ski at all times; Will Fit Any Foot or Ski	$2 00

Weight 8 Oz. per Pair

BARNEY AND BERRY MEN'S AND BOYS' ICE SKATES

Highest Quality now, same as past 60 Years; Known and Used in every Land where Water Freezes
Unequaled in Design, Strength, Workmanship and Finish

HOCKEY SCREW FASTENINGS

Per Pair

Arena—Grade 3; For the International Style of Figure Skating; Blades are tapered on the Bottom from Toe to Heel and are slightly concaved; Foot and Heel are forged, making the strongest possible construction; Mirror Finish throughout $15.00

Size, In.	9	9½	10	10½	11	11½
Weight Pair, Oz.	31	32	33	34	35	36

Per Pair

No. 193—International; Grade 3; For the International Style of Figure Skating; Parallel Edge Blades; Nickel Plated, Mirror Finish $6.00

No. 093—With Ornamented Tops, Blades tapered on the Bottom from Toe to Heel and slightly concaved. Otherwise same as above $10.00

Size, In.	9	9½	10	10½	11	11½
Weight Pair, Oz.	31	32	33	34	35	36

Per Pair

No. 633—Canadian Hockey; Grade 3; Beveled Blades, Hardened and File Tested; Nickel Plated $6.00

Size, In.	9	9½	10	10½	11	11½	12
Wt. Pr., Oz	30	31	32	33	34	35	36

Per Pair

No. 643—Premier Hockey, Grade 3; Nickeled and Polished Welded Steel Blades, Warranted Hard; Cold Rolled Crucible Steel Tops, Edges Beveled; a Popular Model with Expert Hockey Players; all Sizes $6.00

Size, In.	9	9½	10	10½	11	11½	12
Wt. Pr. Oz.	30	31	32	33	34	35	36

Per Pair

No. 642—Interstate Hockey; Grade 3; Nickeled and Polished, Welded Steel Blades, Warranted Hard, Cold Rolled Crucible Steel Tops; Thickness, Bearing on Ice, Curve at Heel and Toe, same as No. 643.... $3.50

Size, In.	9	9½	10	10½	11	11½
Wt. Pr. Oz.	30	31	32	33	34	35

Per Pair

No. 792—Hockey, Ribbed; Welded Tool Steel Blades, Carefully Tempered; Nickel Plated $4.00

Size, In.	9	9½	10	10½	11	11½	12
Wt. Pr. Oz	32	33	34	35	36	37	40

Per Pair

No. 772—Hockey; Welded Tool Steel Blades, Tempered; Cold Rolled Steel Tops; All Nickel Plated, Finely Finished $2.50

Size, In.	9	9½	10	10½	11	11½	12
Wt. Pr. Oz	30	31	32	33	34	35	38

Per Pair

No. 762—Hockey; Special Alloy Steel Blades, Hardened; Cold Rolled Steel Tops; All Nickel Plated, Finely Finished $1 75

Size, In.	9	9½	10	10½	11	11½	12
Wt. Pr. Oz	30	31	32	33	34	35	38

Per Pair

No. 92—Half Hockey, Grade 2; Nickeled and Polished; Welded Steel Blades, Warranted Hard; Cold Rolled Crucible Steel Tops Very Light, for Figure Skating; Safe and Sure $3 00

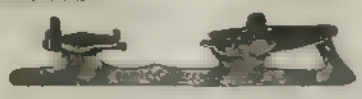
Size, In.	9	9½	10	10½	11	11½	12
Wt. Pr. Oz	30	31	32	33	34	35	38

ALL CLAMP FASTENINGS

Per Pair

No. 692—Security Hockey, Ribbed; Welded Tool Steel Blades; Carefully Tempered; Nickel Plated.... $3.50

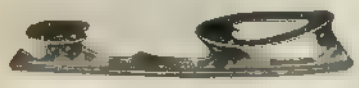
Size, In.	9	9½	10	10½	11	11½
Wt. Pair, Oz	30	31	32	33	34	35



Per Pair

No. 522—H. F., Grade 2; Hockey; Nickel Plated Solid Steel Blades, Hardened; Crucible Steel Tops..... $2.00

Size, In.	9	9½	10	10½	11	11½	12
Wt. Pr.. Oz.	38	39	41	43	44	45	46



Per Pair

No. 94—Half Hockey, Ribbed, Grade 3; Nickeled and Polished, Welded Steel Blades; very light Countersunk Screw Holes for permanent attachment; Safest and Surest for the Figure Skater; $5 00

Size, In.	9	9½	10	10½	11	11½	12
Wt. Pr. Oz.	29	30	31	32	33	34	35

Per Pair

No 662—Hockey; Hardened Steel Blades $2.50

Size, In.	9	9½	10	10½	11	11½
Wt. Pair, Oz.	32	33	34	35	36	37

Per Pair

No. 512—E, Grade 2; Hockey; Nickel Plated Cast Steel Blades; Cold Rolled Crucible Steel Tops..... $1.50

Size, In.	9	9½	10	10½	11	11½	12
Wt. Pr., Oz.	38	39	41	43	44	45	46

All Above, One Pair in a Box

Measure Shoe from Heel to Toe; For Table showing comparative Sizes of Skates and Shoes, See Page 3093
For Explanation of Fastenings, See Page 3094

CONRON EXTENSION ICE SKATES

One Size for Men; One Size for Ladies; One Size for Boys; One Size for Girls

Easy to Adjust and absolutely Secure: the Sole Plates can be moved to any position desired on the Skate Blade by loosening the Tops, and sliding them to the required length on the Runner; Tighten the Nuts and you have a rigid Skate which fits the Shoe; These Skates are used by the most expert Skaters in the world

MEN'S ROCKER TYPE

Adjustable to Sizes 11, 11½ and 12 in. — Per Pair

No. 61—Highly Polished; High Point Carbon Steel Blades; Cold Rolled Steel Plates and Supports; Screw Clamps.....$1.00

No. 610—Nickel Plated; High Point Carbon Steel Blades; Cold Rolled Steel Plates and Supports, Polished, Nickeled and Buffed; Screw Clamps..... 1.50

No. 630—Hand Tempered Nickel Plated; High Point Carbon Steel Blades; Cold Rolled Steel Plates and Supports, Highly Polished, Nickeled and Buffed; Screw Clamps..... 2.25

MEN'S HOCKEY TYPE

Adjustable to Sizes 11, 11½ and 12 in. — Per Pair

No. 41—Highly Polished; High Point Carbon Steel Blades; Cold Rolled Steel Plates and Supports; Screw Clamps $1.00

No. 410—Nickel Plated; High Point Carbon Steel Blades; Cold Rolled Steel Plates and Supports, Polished, Nickeled and Buffed; Screw Clamps..... 1.50

No. 430—Hand Tempered Nickel Plated; High Point Carbon Steel Blades; Cold Rolled Steel Plates and Supports, Highly Polished, Nickeled and Buffed; Screw Clamps..... 2.25

BOYS' ROCKER TYPE

Adjustable to Sizes 9, 9½, 10 and 10½ in. — Per Pair

No. 60—Highly Polished; High Point Carbon Steel Blades; Cold Rolled Steel Plates and Supports; Screw Clamps...$1.00

No. 600—Nickel Plated; High Point Carbon Steel Blades; Cold Rolled Steel Plates and Supports, Polished, Nickeled and Buffed; Screw Clamps..... 1.50

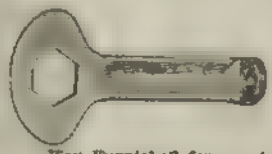
BOYS' HOCKEY TYPE

Adjustable to Sizes 9, 9½, 10 and 10½ in. — Per Pair

No. 40—Highly Polished; High Point Carbon Steel Blades; Cold Rolled Steel Plates and Supports; Screw Clamps.....$1.00

No. 400—Nickel Plated; High Point Carbon Steel Blades; Cold Rolled Steel Plates and Supports, Polished, Nickeled and Buffed; Screw Clamps..... 1.50

One Pair in a Box; Average Weight 33 Oz. per Pair



Key Furnished for use in adjusting Conron

LADIES' ROCKER TYPE

Adjustable to Sizes 10, 10½ and 11 in. — Per Pair

No. 51—Highly Polished; High Point Carbon Steel Blades; Cold Rolled Steel Plates and Supports; Russet Grain Leather Heel Support and Strap; Screw Toe Clamp.....$1.50

No. 510—Nickel Plated; High Point Carbon Steel Blades; Cold Rolled Plates and Supports, Polished, Plated and Buffed; Russet Grain Leather Heel Support and Strap; Screw Toe Clamp 2.00

No. 530—Hand Tempered Nickel Plated; High Point Carbon Steel Blades; Cold Rolled Steel Plates and Supports, Highly Polished; Nickeled and Buffed; Russet Grain Leather Heel Support and Strap; Screw Toe Clamp..... 3.00

LADIES' HOCKEY TYPE

Adjustable to Sizes 10, 10½ and 11 in. — Per Pair

No. 31—Highly Polished; High Point Carbon Steel Blades; Cold Rolled Steel Plates and Supports; Russet Grain Leather Heel Support and Strap; Screw Toe Clamp.....$1.50

No. 310—Nickel Plated; High Point Carbon Steel Blades; Cold Rolled Plates and Supports, Polished, Plated and Buffed; Russet Grain Leather Heel Support and Strap; Screw Toe Clamp 2.00

No. C330—Hand Tempered Nickel Plated; High Point Carbon Steel Blades; Cold Rolled Steel Plates and Supports, Highly Polished; Nickeled and Buffed; Russet Grain Leather Heel Support and Strap; Screw Toe Clamp..... 3.00

GIRLS' ROCKER TYPE

Adjustable to Sizes 8, 8½, 9 and 9½ in. — Per Pair

No. 50—Highly Polished; High Point Carbon Steel Blades; Cold Rolled Steel Plates and Supports; Russet Grain Leather Heel Support and Strap; Screw Toe Clamp.....$1.50

No. 500—Nickel Plated; High Point Carbon Steel Blades; Cold Rolled Plates and Supports, Polished, Plated and Buffed; Russet Grain Leather Heel Support and Strap, Screw Toe Clamp 2.00

GIRLS' HOCKEY TYPE

Adjustable to Sizes 8, 8½, 9 and 9½ in. — Per Pair

No. C30—Highly Polished; High Point Carbon Steel Blades; Cold Rolled Steel Plates and Supports; Russet Grain Leather Heel Support and Strap; Screw Toe Clamp.....$1.50

No. 300—Nickel Plated; High Point Carbon Steel Blades; Cold Rolled Plates and Supports, Polished, Plated and Buffed; Russet Grain Leather Heel Support and Strap, Screw Toe Clamp 2.00

One Pair in a Box; Average Weight 36 Oz. per Pair

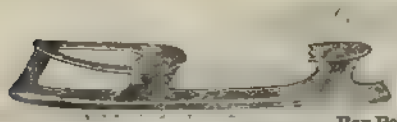
Shows Sole Plate and Blade of Skate separated; Note solid construction of the two parts

The Conron Extension Skate is Easily Adjusted

Shows Rear Post of Sole Plate in position on Blade of Skate, Part ready to slide back for locking

Shows Parts in position and Key in place for locking, a turn of the Key locks parts rigidly

KEENE ICE SKATES



Per Pair

No. 0107—Men's or Ladies; Half Hockey; Screw Fastening; Ribbed Runners; Hard Tempered Steel; Beveled Edges, Full Polished and Nickel Plated $3.00

Size, In	9	9½	10	10½	11	11½
Wt. Pr., Oz	26	27	28	29	30	30

Per Pair

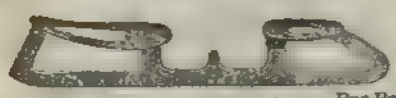
No. 107—Men's or Ladies; Hockey; Screw Fastening; Ribbed Runners; Hard Tempered Steel; Full Polished and Nickel Plated; Top Plates with Polished Edges.....$2.50

Size, In	9	9½	10	10½	11	11½
Wt. Pr., Oz	26	27	28	29	30	30

Per Pair

No. 105—Men's or Ladies'; Hockey; Screw Fastening; Runners made of Hard Tempered Steel; Polished and Nickel Plated $1.50

Size, In	9	9½	10	10½	11	11½
Wt. Pr., Oz	22	23	25	26	27	27



Per Pair

No. 102—Men's or Ladies'; Hockey: Screw Fastening; Cast Steel Runners; Polished and Nickel Plated.$0.75

Size, In	9	9½	10	10½	11	11½
Wt. Pr., Oz	23	24	25	26	27	27

Per Pair

No. 300—Men and Boys; All Clamp Fastening; Cast Steel Runners, Polished; Cold Rolled Steel Tops and Clamps $0.50

Size, In	8	8½	9	9½	10	10½	11	11½
Wt. Pr., Oz	27	27	28	34	35	36	37	38

Per Pair

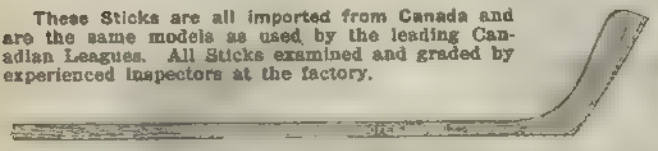
No. 400L—Women and Children; Clamp Fastening; Cast Steel Runners, Polished; Cold Rolled Steel Tops and Clamps; Leather Strap.....$1.00

Size, In	8	8½	9	9½	10	10½
Wt. Pr., Oz.	25	25	27	29	30	32

All Above, One Pair in a Package

HOCKEY STICKS

These Sticks are all imported from Canada and are the same models as used by the leading Canadian Leagues. All Sticks examined and graded by experienced inspectors at the factory.

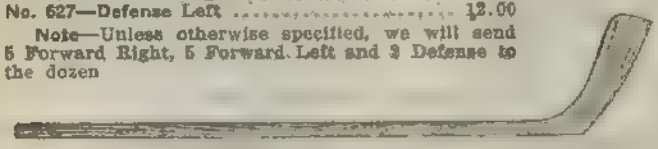


PROFESSIONAL

Made from the Best Selected Growth Rock Elm, Long Handle, Well Proportioned and Balanced, has a Low-Set, Flat Bottom and Long Reach; a General Favorite, with the Best League and Professional Players, especially adapted to all Players who play the Puck and not the man; the Low-Set, Flat Handle, setting close to the ice on a long reach, will stop the Puck when the ordinary stick will permit the Puck to pass under the Heel or Toe of the stick; the advantage of this shape will be appreciated by the Experienced Player.

	Per Dozen
No. 624—Forward Right	$12.00
No. 625—Forward Left	12.00
No. 626—Defense Right	12.00
No. 627—Defense Left	12.00

Note—Unless otherwise specified, we will send 5 Forward Right, 5 Forward Left and 2 Defense to the dozen

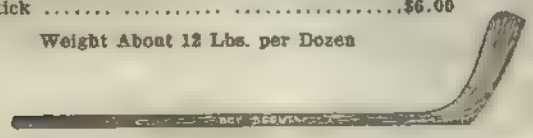


INTER STATE

Per Dozen

No. 401—Made on the same lines as our better grade Sticks; Very popular as an all around Stick $6.00

Weight About 12 Lbs. per Dozen



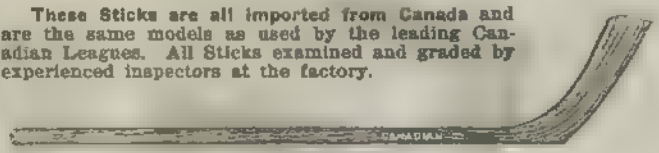
BOY SCOUT

Per Dozen

No. 200—A very good Boys' Practice Stick; Length 38 in., Width of Blade 2 in.....$3.00

Weight About 9 Lbs. per Dozen

These Sticks are all imported from Canada and are the same models as used by the leading Canadian Leagues. All Sticks examined and graded by experienced inspectors at the factory.



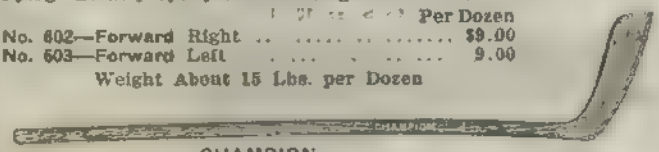
CANADIEN

A Favorite Among Canadian Players of All Classes

Mark Hooper Pattern; Made from Thoroughly Seasoned Rock Elm, with Grain of Wood, running to Curve of Stick, Has "Flat Lying" Blade properly trimmed to give correct balance.

	Per Dozen
No. 602—Forward Right	$9.00
No. 603—Forward Left	9.00

Weight About 15 Lbs. per Dozen

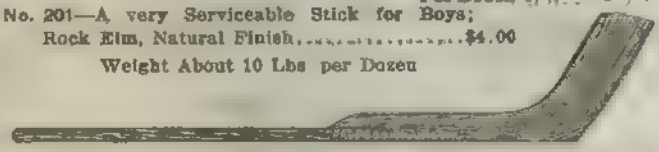


CHAMPION

Per Dozen

No. 201—A very Serviceable Stick for Boys; Rock Elm, Natural Finish.....$4.00

Weight About 10 Lbs per Dozen



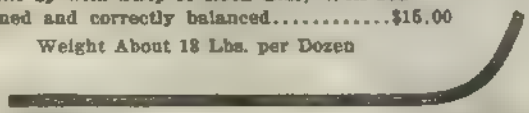
GOAL BUILT-UP

Made to Stand the Rough Usage to which a Goal Stick is Subjected

Per Dozen

No. 801—Made of Finest Selected Rock Elm, built up with Strip of Rock Elm; Well seasoned and correctly balanced.....$15.00

Weight About 18 Lbs. per Dozen



JUVENILE

Per Dozen

No. 10—Oak; Sandpaper Finish; Length 36 in., Width of Blade ⅞ in.; ½ in. Thick.....$1.20

Weight About 6 Lbs. per Dozen

BOYS' PRACTICE

Per Dozen

No. 15—Selected Oak, Sandpaper Finish; Length 40 in., Width of Blade 1 in.; ⅝ in. Thick..$1.80

Weight About 9 Lbs. per Dozen

All Hockey Sticks, Half Dozen in a Bundle

WAKEFIELD INTERCHANGEABLE FIXTURES

SUGGESTIONS FOR Nos. 1213 AND 1200 CANOPIES

PLATE No. 1213A
DINING ROOM LAMP

PLATE No. 1213A

Length 30 In.

Composed of Canopy No. 1213, 1 ½-in. Terminal No. 1226, 7 Links ½ in. chain No. 1223, 1 Medium Neck and Nipple No. 1221 and 1 4-in. Globe Holder No. 1203.

	Each
No. 1213A-BB—Brushed Brass	$2.35
No. 1213A-OC—Oxidized Copper	2.35

Weight 1⅝ Lbs. Each

PLATE No. 1200M

Length 30 In.

Composed of Canopy No. 1200 2 ⅜-in. Terminals No. 1225, 12 Links ⅜ in. Chain and 1 4-in. Globe Holder No. 1203.

	Each
No. 1200M BB—Brushed Brass	$1.97
No. 1200M-OC—Oxidized Copper	1.97

Weight 1½ Lbs. Each

PLATE No. 1200M
DINING ROOM LAMP

PLATE No. 1200B

CEILING CLUSTER

Composed of Canopy No. 1200, 3 Cast Husks No. 1206 and 3 Small Necks and Nipples No. 1205.

	Each
No. 1200B-BB—Brushed Brass	$2.71
No. 1200B-OC—Oxidized Copper	2.71

Weight 1¾ Lbs. Each

PLATE No. 1200C

CEILING CLUSTER

Composed of Canopy No. 1200, 5 Cast Husks No. 1206, 4 Small Necks and Nipples, 1 6-in. Stem No. 1202 and 1 3¼-in. Globe Holder No. 1204.

	Each
No. 1200C-BB—Brushed Brass	$4.63
No. 1200C-OC—Oxidized Copper	4.63

Weight 2¾ Lbs. Each

PLATE No. 1200J

CEILING DROP LIGHT

Length 11 In.

Composed of Canopy No. 1200, 2 ⅜-in. Terminals No. 1225 and 4 Links ⅜ in. Chain No. 1222.

	Each
No. 1200J-BB—Brushed Brass	$1.30
No. 1200J-OC—Oxidized Copper	1.30

Weight 1⅝ Lbs. Each

Note—Prices do not include Sockets, Glassware, or Trimmings except where specified

WAKEFIELD SQUARE CEILING PLATES

For Electric Ceiling Clusters and Shower Effects

This Plate is made on the interchangeable order, that is, it is possible to attach different material to give different effects and it is also possible to use the same fixture for either 1, 2, 3, 4 or 5 Lights. The special construction makes these fixtures much more rigid than other plates now on the market. They are provided for Crowfoot or Insulating Joint Attachment, and a newly patented feature provides for their being installed without turning the fixture, thus eliminating the marring of finished ceilings. Size of Plates 14x14 in.

No. 1239A—PLATES ONLY

	Each
No. 1239A-BB—Brushed Brass	$4.50
No. 1239A-OC—Oxidized Copper	4.50

Weight 3½ Lbs. Each

No. 1239C
Composed of Plate No. 1239A with No. 1233 Terminal Couplings

No. 1239C—PLATES WITH 1233 TERMINAL COUPLINGS

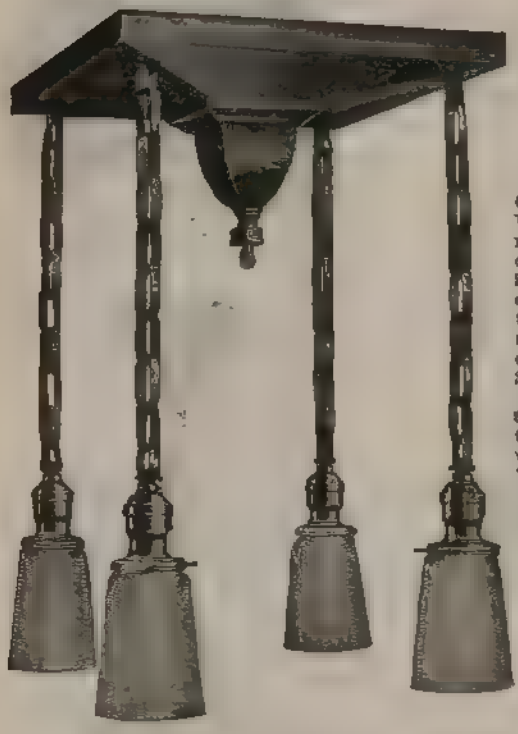
Four Light Fixture
Composed of following
1 No. 1239A Plate
4 pair No. 1233 Terminal Couplings

	Each
No. 1239C-BB—Brushed Brass	$5.10
No. 1239C-OC—Oxidized Copper	5.10

Five Light Fixture
Composed of following
1 No. 1239A Plate
5 pair No. 1233 Terminal Couplings

No. 1239C-5BB—Brushed Brass	$6.25
No. 1239C-5OC—Oxidized Copper	6.25

Weight 5¾ Lbs. Each



No. 1239F

By using No. 1239A Ceiling Plate with any Wakefield standard materials such as listed on preceding pages, it is possible to secure not only effects as illustrated, but there can be made up a large variety of Ceiling Clusters and Shower Effects.

Send for Circulars of Suggestions showing the many effects made with this Plate No. 1239A.

Length 18 in.
14 in. Square

No. 1239K

Composed of following parts

Four Light	Five Light
1 No. 1239A Plate	1 No. 1239A Plate
8 No. 1225 ⅜ in. Terminals	10 No. 1225 ⅜ in. Terminals
32 Links No. 1222 ⅜ in. Chain	40 Links No. 1222 ⅜ in. Chain

	Four Light	Five Light
Brushed Brass, Nos.	1239F-BB	1239F-5BB
Oxidized Copper, Nos.	1239F-OC	1239F-5OC
Each	$6.82	7.40

Weight about 5⅛ Lbs. Each

Composed of following parts

Four Light	Five Light
1 No. 1239A Plate	1 No. 1239A Plate
8 No. 1225 ⅜ in. Terminals	10 No. 1225 ⅜ in. Terminals
4 No. 1202 12 in. Stems	5 No. 1202 12 in. Stems
4 No. 1206 Husks	5 No. 1206 Husks

	Four Light	Five Light
Brushed Brass, Nos.	1239K-BB	1239K-5BB
Oxidized Copper, Nos.	1239K-OC	1239K-5OC
Each	$10.00	11.50

Weight 7¼ Lbs. Each

Note—Prices do not include Sockets, Glassware and Incandescent Lamps as shown in above cuts.

WAKEFIELD INTERCHANGEABLE FIXTURES

ELECTRIC

Length 12 in., Spread 23 in.
Composed of Ceiling Fixture No. 1245 and Arms No. 238

TWO ARMS (TWO LIGHTS)

	Each
No. 1245A-2BB—Brushed Brass	$4.50
No. 1245A-2OC—Oxidized Copper	4.50

THREE ARMS (THREE LIGHTS)

	Each
No. 1245A-3BB—Brushed Brass	$5.25
No. 1245A-3OC—Oxidized Copper	5.25

FOUR ARMS (FOUR LIGHTS)

No. 1245A-4BB—Brushed Brass	$6.00
No. 1245A-4OC—Oxidized Copper	6.00

Average Weight 3¾ Lbs. Each.

Length 10 in., Spread 20 in.
Composed of Ceiling Fixture No. 1246 and Arms No. 225

TWO ARMS (TWO LIGHTS)

	Each
No. 1246B-2BB—Brushed Brass	$5.40
No. 1246B-2OC—Oxidized Copper	5.40

FOUR ARMS (FOUR LIGHTS)

	Each
No. 1246B-4BB—Brushed Brass	$6.80
No. 1246B-4OC—Oxidized Copper	6.80

Average Weight 3¾ Lbs. Each.

Length 12 in., Spread 16 in.
Composed of Ceiling Fixture No. 1241, Arms No. 241 and Adapter No. 1233

TWO ARMS (TWO LIGHTS)

	Each
No. 1241A-2BB—Brushed Brass	$5.30
No. 1241A-2OC—Oxidized Copper	5.30

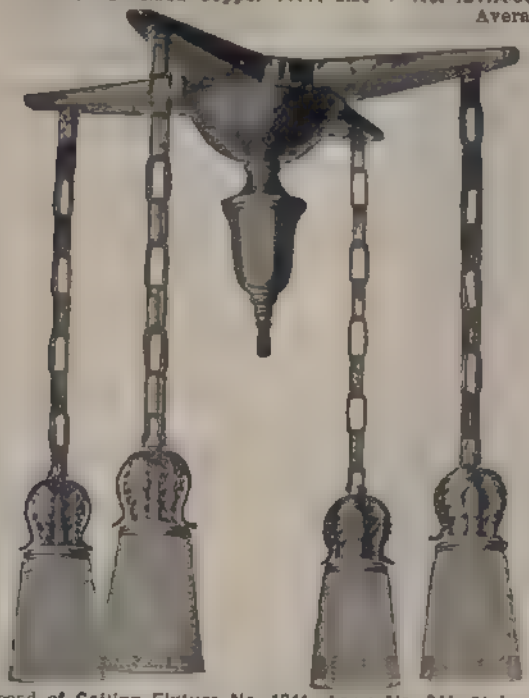
THREE ARMS (THREE LIGHTS)

	Each
No. 1241A-3BB—Brushed Brass	$6.45
No. 1241A-3OC—Oxidized Copper	6.45

FOUR ARMS (FOUR LIGHTS)

	Each
No. 1241A-4BB—Brushed Brass	$7.60
No. 1241A-4OC—Oxidized Copper	7.60

Average Weight 4 Lbs. Each



Length 16 in.,
Spread 16 in.

Composed of Ceiling Fixture No. 1241, Arms No. 241, ⅜ in. Chain, Teminals and Husks No. 1206.

TWO ARMS (TWO LIGHTS)

	Each
No. 1241B-2BB—Brushed Brass	$7.16
No. 1241B-2OC—Oxidized Copper	7.16

THREE ARMS (THREE LIGHTS)

No. 1241B-3BB—Brushed Brass	9.24
No. 1241B-3OC—Oxidized Copper	9.24

FOUR ARMS (FOUR LIGHTS)

No. 1241B-4BB—Brushed Brass	11.32
No. 1241B-4OC—Oxidized Copper	11.32

Average Weight 4½ Lbs. Each.

Composed of Ceiling Fixture No. 1241, Arms No. 241, 12 in. Stems No. 1202, Adapters No. 1233 and Husks No. 1206

TWO ARMS (TWO LIGHTS)

	Each
No. 1241C-2BB—Brushed Brass	$ 7.50
No. 1241C-2OC—Oxidized Copper	7.50

THREE ARMS (THREE LIGHTS)

No. 1241C-3BB—Brushed Brass	9.75
No. 1241C-3OC—Oxidized Copper	9.75

FOUR ARMS (FOUR LIGHTS)

No. 1241C-4BB—Brushed Brass	12.00
No. 1241C-4OC—Oxidized Copper	12.00

Average Weight 4½ Lbs. Each.

Bottom Light or Pendant Switch may be attached to any of above.

WAKEFIELD INTERCHANGEABLE FIXTURES

COMPONENT PARTS

FOR PRESSED ARMS
Diam. 6 in., may use from 2 to 4 Lights.

	Each
No. 1241-BB—Brushed Brass	$3.00
No. 1241-OC—Oxidized Copper	3.00

Weight 2 Lbs. Each.

FOR SQUARE ARMS
Diam. 6 in., may use 3 or 4 Lights.

	Each
No. 1246-BB—Brushed Brass	$4 00
No. 1246-OC—Oxidized Copper	4.00

Weight 2½ Lbs. Each.

FOR ROUND ⅝ IN. CLAMPING ARMS
Diam. 6 in., may use 2 to 4 Lights.

	Each
No. 1245-BB—Brushed Brass	$3.00
No. 1245-OC—Oxidized Copper	3.00

Weight 2¾ Lbs. Each.

PRESSED ARMS
For use on above Fixture; Spread 5 in.

	Each
No. 241BB—Brushed Brass	$1 00
No. 241OC—Oxidized Copper	1.00

Weight 4 Oz. Each.

The Fixtures shown on this page are the very latest production in the Wakefield Line; we will continue to add all new features which are brought out from time to time, thus keeping up to date with the increasing demand for Wakefield Fix

WAKEFIELD INTERCHANGEABLE FIXTURES

UNIVERSAL ELECTRIC ARMS

For use on Wakefield Interchangeable Stems

¾ In. Square Tubing
Brushed Brass Finish

Nos.	224BB	225BB	226BB
Spread, In..	6	9	12
Wt. Oz., Ea.	3	5	6
Each	$0.60	.70	.80

Oxidized Copper Finish

Nos.	224OC	225OC	226OC
Spread, In..	6	9	12
Wt. Oz., Ea.	3	5	6
Each	$0.60	.70	.80

⅝ In. Tubing
Brushed Brass Finish

Nos.	Spread	Weight	Each
234-BB	3 in.	2¼ Oz.	$0.85
221-BB	6 in.	4½ Oz.	1.00
222-BB	9 in.	5½ Oz.	1.10
223-BB	12 in.	6½ Oz.	1.20

Oxidized Copper Finish

Nos.	Spread	Weight	Each
234-OC	3 in.	2¼ Oz.	$0.85
221-OC	6 in.	4½ Oz.	1.00
222-OC	9 in.	5½ Oz.	1.10
223-OC	12 in.	6½ Oz.	1.20

⅝ In. Tubing
Brushed Brass Finish

Nos.	231BB	232BB	233BB
Spread, In..	6	9	12
Wt. Oz., Ea.	2	4	6
Each	$0.65	.75	.85

Oxidized Copper Finish

Nos.	231OC	232OC	233OC
Spread, In..	6	9	12
Wt. Oz., Ea.	2	4	6
Each	$0.65	.75	.85

⅜ In. Tubing; 6 In. Spread;
Especially adapted to Tungsten Lamps.

Nos.	Each
203-BB—Brushed Brass	$0.45
203-OC—Oxidized Copper..	.46

Weight 2½ Oz Each

⅜ In. Tubing; 6 In. Spread

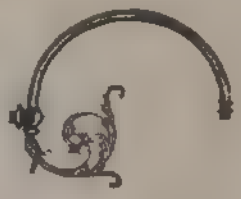
Nos.	Each
204-BB—Brushed Brass	$0.35
204-OC—Oxidized Copper..	.35

Weight 2½ Oz.

⅜ In. Tubing; 6 In. Spread
Especially adapted for Tungsten Lamps

Nos.	Each
207-BB—Brushed Brass	$0.45
207-OC—Oxidized Copper..	.45

Weight 2½ Oz. Each



⅜ In. Tubing; 6½ In. Spread
Especially adapted for Tungsten Lamps

Nos.	Each
211-BB—Brushed Brass..	$0.85
211-OC—Oxidized Copper..	.85

Weight 6½ Oz. Each

⅜ In. Tubing; 6 In. Spread

Nos.	Each
211½-BB—Brushed Brass..	$0.80
211½-OC—Oxidized Copper	.80

Weight 6 Oz. Each

⅜ In. Tubing; 9 In. Spread

Nos.	Each
212-BB—Brushed Brass....	$0.90
212-OC—Oxidized Copper..	.90

Weight 7 Oz. Each

⅜ In. Tubing; 6½ In. Spread
Especially adapted for Tungsten Lamps

Nos.	Each
215-BB—Brushed Brass....	$1.10
215-OC—Oxidized Copper..	1.10

Weight 6 Oz. Each

⅜ In. Tubing; 6 In. Spread

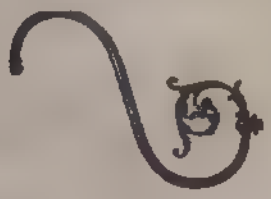
Nos.	Each
217-BB—Brushed Brass....	$1.05
217-OC—Oxidized Copper..	1.05

Weight 5½ Oz. Each

⅜ In. Tubing; 9 In. Spread

Nos.	Each
218-BB—Brushed Brass....	$1.25
218-OC—Oxidized Copper..	1.25

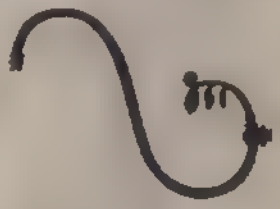
Weight 6½ Oz Each



⅜ In. Tubing; 9 In. Spread

Nos.	Each
227-BB—Brushed Brass....	$1.00
227-OC—Oxidized Copper..	1.00

Weight 6 Oz. Each



⅜ In. Tubing; 9 In. Spread

Nos.	Each
230-BB—Brushed Brass....	$1.35
230-OC—Oxidized Copper..	1.35

Weight 6 Oz. Each

½ In. Tubing; 8 In. Spread

Nos.	Each
236-BB—Brushed Brass....	$1.10
236-OC—Oxidized Copper..	1.10

Weight 9 Oz. Each

½ In. Tubing; 8 In. Spread

Nos.	Each
237-BB—Brushed Brass....	$1.25
237-OC—Oxidized Copper..	1.25

Weight 9 Oz. Each

Dead Black and Nickel Finishes are not Carried in Stock, but can be Furnished on Special Order from the Factory at same prices as Brushed Brass

All Arms are wrapped in Heavy Paper which prevents marring or scratching during shipment

Ask for one of our Special Hexagon Back Arm Wrenches

WAKEFIELD INTERCHANGEABLE FIXTURES

GAS ARMS

For use on Wakefield Interchangeable Stems

½ in. Tubing; 8½ in. Spread

	Each
No. 14-BB—Brushed Brass	$1 30
No. 14-OC—Oxidized Copper	1 30

Weight 7½ Os. Each

⅜ in. Square Tubing; 9 in. Spread; Can be used for either Upright or Vertical Gas Lights.

	Each
No. 25-BB—Brushed Brass	$1.40
No. 25-OC—Oxidized Copper	1.40

Weight 8 Os. Each

COMBINATION GAS AND ELECTRIC ARMS

¾ in. Square Tubing; 9 in. Spread

	Each
No. 1425-BB—Brushed Brass	$1.40
No. 1425-OC—Oxidized Copper	1.40

Weight 8 Oz. Each

⅜ in. Tubing; 6 in. Spread

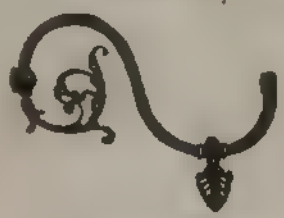
	Each
No. 1-BB—Brushed Brass	$0.60
No. 1-OC—Oxidized Copper	.60

Weight 3 Os. Each

⅜ in. Tubing; 8¼ in. Spread

	Each
No. 4-BB—Brushed Brass	$0.60
No. 4-OC—Oxidized Copper	.60

Weight 4½ Os. Each



⅜ in. Tubing; 9 in. Spread

	Each
No. 12-BB—Brushed Brass	$1.15
No. 12-OC—Oxidized Copper	1.15

Weight 9 Os. Each

⅜ in. Tubing; 6½ in. Spread

	Each
No. 13-BB—Brushed Brass	$1.10
No. 13-OC—Oxidized Copper	1.10

Weight 5 Os. Each

⅜ in. Tubing; 8¼ in. Spread

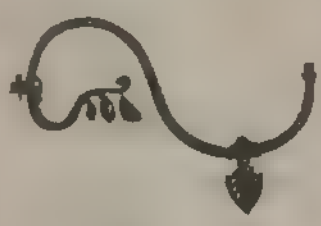
	Each
No. 16-BB—Brushed Brass	$1 30
No. 16-OC—Oxidized Copper	1.30

Weight 9 Os. Each

⅜ in. Tubing; 6½ in. Spread

No. 17-BB—Brushed Brass	1.30
No. 17-OC—Oxidized Copper	1.30

Weight 6 Os. Each



⅜ in. Tubing; 9 in. Spread

	Each
No. 18-BB—Brushed Brass	$1.50
No. 18-OC—Oxidized Copper	1.50

Weight 8¼ Os. Each

⅜ in. Tubing; 8¼ in. Spread

	Each
No. 3-BB—Brushed Brass	$0.75
No. 3-OC—Oxidized Copper	.75

Weight 5 Os. Each

⅜ in. Tubing; 9 in. Spread

	Each
No. 11-BB—Brushed Brass	$1.30
No. 11-OC—Oxidized Copper	1.30

Weight 10 Os. Each

⅜ in. Tubing; 9 in. Spread

	Each
No. 15-BB—Brushed Brass	$1 60
No. 15-OC—Oxidized Copper	1 60

Weight 10 Os. Each

⅜ in. Tubing; 6 in. Spread

	Each
No. 21-BB—Brushed Brass	$0.65
No. 21-OC—Oxidized Copper	.65

Weight 4 Os. Each

Dead Black and Nickel Finishes are not Carried in Stock, but can be Furnished on Special Order from the Factory at same prices as Brushed Brass

All Arms are wrapped in Heavy Paper which prevents marring or scratching during shipment

For Stiff Joints, Wall Plates, Eli Burner Cocks and Swing Joints, see page 384

Ask for one of our Special Hexagon Back Arm Wrenches

WAKEFIELD INTERCHANGEABLE FIXTURES

COMPONENT PARTS

Showing Links
Open Closed

FIXTURE CHAIN

With Terminals Attached

Especially adapted for Chandeliers. The Flexibility and Spring in the Chain serves as a cushion to counteract the jar; Flat Detachable Links, Heavy Brass.

Brushed Brass	1222-BB	1223-BB
Oxidized Copper	1222-OC	1223-OC
Width, In.	⅜	½
Length Links, In.	1½	2½
Wt. per Ft., Oz.	2	3
Per Foot	$0 25	30

Brushed Brass	1224-BB
Oxidized Copper	1224-OC
Width, In.	¾
Length Links, In.	2¾
Wt. per Ft., Oz.	4
Per Foot	$0 50

⅜ In. 100; ½ In. 50, ¾ In. 36 in Box

TERMINAL COUPLINGS

Used on the Ends of Chain to attach Chain to Bodies of Canopies; Heavy Brass; ⅜ in. tapped for ⅛ in. Pipe and ⅛ and ¼ in. tapped for ¼ and ⅛ in. Pipe.

Brushed Brass	1225-BB	1226-BB	1227-BB
Oxidized Copper	1225-OC	1226-OC	1227-OC
Width, In.	⅜	½	¾
Each	$0.15	.30	.80

Weight about 1 Oz. Each

NEW TERMINAL COUPLINGS

These New Terminal Couplings are adapted especially for Socket connections to any Wakefield Arms for use with Mazda Lamps; Easy to disconnect—simply spring the loop from its seating in the fitting with a pair of pliers as illustrated; These Couplings come in pairs, one end Male and the other Female.

⅛ In. Pipe Connection

	Per Pair
No. 1233-BB—Brushed Brass Finish	$0.15
No. 1233-OC—Oxidized Copper Finish	.16

Weight 1 Oz. per Pair

Showing Parts of which Chain is composed; Terminal is sold separate.

UTILITY CHAIN

With Filler; ½ In. Wide

This is the regular Wakefield Chain with a Filler inserted in each Link giving it a more substantial appearance; The Filler is easily inserted or removed.

	Per Foot
No. 1243-BB—Brushed Brass	$0 50
No. 1243-OC—Oxidized Copper	.50

PARTS FOR UTILITY CHAIN

	Each
No. 1242-BB—Filler, Brushed Brass	$0.04
No. 1242-OC—Filler, Oxidized Copper	.04
No. 1244-BB—Terminal, Brushed Brass	.35
No. 1244-OC—Terminal, Oxidized Copper	.35

These Candle Holders may be attached to any of the Straight Arms.

CANDLE HOLDERS COMPLETE WITH BOBECHES AND CANDLES

	Each
No. 2006-BB—Brushed Brass Finish	$0.46
No. 2006-OC—Oxidized Copper Finish	.46

Weight 4 Oz. Each

No. 2005—Candles only	.06

BOBECHES ONLY

No. 2003-BB—Brushed Brass Finish	.15
No. 2003-OC—Oxidized Copper Finish	.15

CANDLE HOLDERS ONLY

No. 2004-BB—Brushed Brass Finish	25
No. 2004-OC—Oxidized Copper Finish	.25

STEMS

Used where a Short Drop Ceiling Light is desired. Many beautiful combinations may be effected with this stem; Diameter ½ in.; Heavy Seamless Brass.

Brushed Brass, Nos.	1202-BB6	1202-BB12
Oxidized Copper, Nos.	1202-OC6	1202-OC12
Length, In.	6	12
Weight, Oz.	4	7
Each	$0.45	.50

Longer Lengths can be furnished at an additional charge of 30 cents per foot.

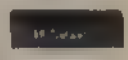
SOCKET NIPPLES

Used to connect Socket to bottom of Canopy for Terminal Light; ⅛ in. Pipe Connection.

	Each
No. 1228-BB—Brushed Brass Finish	$0 03
No. 1228-OC—Oxidized Copper Finish	.03

Weight ¼ Oz Each

Neck



Nipple

NECKS AND NIPPLES

Used in many places to connect parts of a fixture such as Canopies and Husks or Shade Holders and Bodies, etc.

Small Neck

Diameter, Neck, ⅝ in.; Depth ⅜ in.; Nipple, Length 1 in.; Diameter ¼ in.

	Per Set
No. 1205-BB—Brushed Brass Finish	$0.12
No. 1205-OC—Oxidized Copper Finish	.12

Medium Neck

Diameter, Neck, 1⅛ in.; Depth ⅜ in.; Nipple, Length 1¼ in.; Diameter ⅛ in.

	Per Set
No. 1221-BB—Brushed Brass Finish	$0.12
No. 1221-OC—Oxidized Copper Finish	.12

Square Neck

No. 2205-BB—Brushed Brass Finish	$0.12
No. 2205-OC—Oxidized Copper Finish	.12

Weight 1 Oz. per Set

GAS FIXTURES

STIFF JOINT

For use with any Gas Arm to make Wall Brackets

Diameter 1 in.; Depth ¾ in.; ⅜ in. and ⅛ in. Iron Pipe Thread

	Each
No. 1000-BB—Brushed Brass Finish.	$0 16
No. 1000-OC—Oxidized Copper Finish..	16

Weight 1 Oz. Each

SWING JOINTS

The Hinge Joint in a Swinging Arm ⅜ in. and ½ in. Iron Pipe Thread; Will fit any Wakefield Arm

	Each
No. 1001-BB—Brushed Brass Finish...	$0 65
No. 1001-OC—Oxidized Copper Finish..	65

Weight 4 Oz. Each

WALL PLATE

Used to give a finished appearance to Stiff or Swing Wall Brackets

Diam. 3¾ in.; Depth ¾ in.; Spun Shell

	Each
No. 1003-BB—Brushed Brass Finish ..	$0.15
No. 1003-OC—Oxidized Copper Finish..	.15

Weight 1½ Oz Each

PILLAR COCKS

⅜ in. Brass Tubing or ⅛ in. Iron Pipe Thread

	Each
No. 1008-BB—Brushed Brass Finish....	$0 35
No. 1008-OC—Oxidized Copper Finish..	.35

Weight 2 Oz Each

ELL BURNER COCKS

Used to connect Portable Lamps or Gas Stoves to unused outlet of Gas Stems. May be Attached to all Gas Stems, ⅜ in. Brass Tubing or ⅛ in. Iron Pipe Thread

	Each
No. 1002-BB—Brushed Brass Finish...	$0.40
No. 1002-OC Oxidized Copper Finish..	.40

Weight 2 Oz. Each

NOZZLES

⅛ in. Iron Pipe Thread

	Each
No. 161—Brushed Brass	$0.10

BRASS GAS FIXTURE FITTINGS

No. 0983—PILLAR COCKS

Size Pipe, In	⅛	¼	⅜
Weight Doz., Lbs...	1½	2⅝	3
Per Dozen	$3 90	4.25	4.56

No. 0968—HOSE COCKS

For Hose for Drop Lights and Stoves

Size Pipe, In	⅛	¼	⅜
Weight Doz., Lbs.....	1¾	2½	3½
Per Dozen	$4.25	4.55	4 90

No. 0971—ELL BURNER COCKS

For Ends of Brackets or Chandeliers

Size Pipe, In	⅛	¼	⅜
Weight Doz., Lbs.....	1⅝	2⅜	3
Per Dozen.....	$4.25	4.55	5.20

GAS WALL BRACKETS

For ⅜ in. Iron Pipe, Wall Plate 2½ in. Diameter; Burner Cup 1 in. Diameter

POLISHED BRASS, SQUARE TUBE, STRAIGHT

Each

No. 857—Stationary, Length 7 in.....$0.95

Weight 5 Lbs. per Dozen

Each

No. 859—Single Swing, Length 11½ in..$1 60

Weight 8½ Lbs. per Dozen

Each

No. 860—Double Swing, Length 21 in..$2.25

Weight 10 Lbs. per Dozen

GILT BRASS, ROUND TUBE, STRAIGHT

Each

No. 850—Stationary, Length 6½ in....$0.65

Weight 4½ Lbs. per Dozen

Each

No. 852—Single Swing, Length 11 in...$0.85

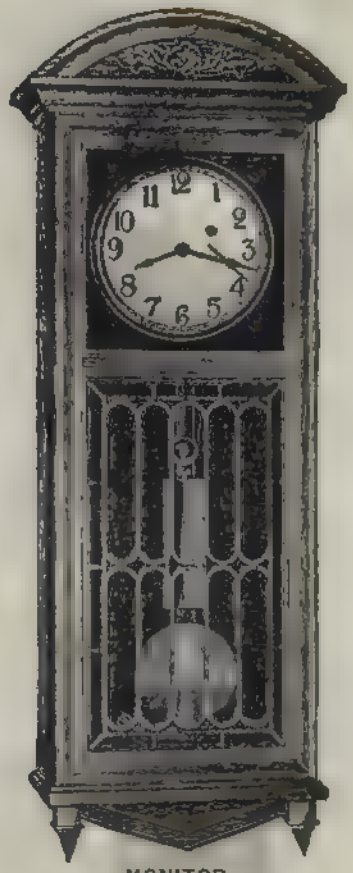
Weight 6 Lbs. per Dozen

Each

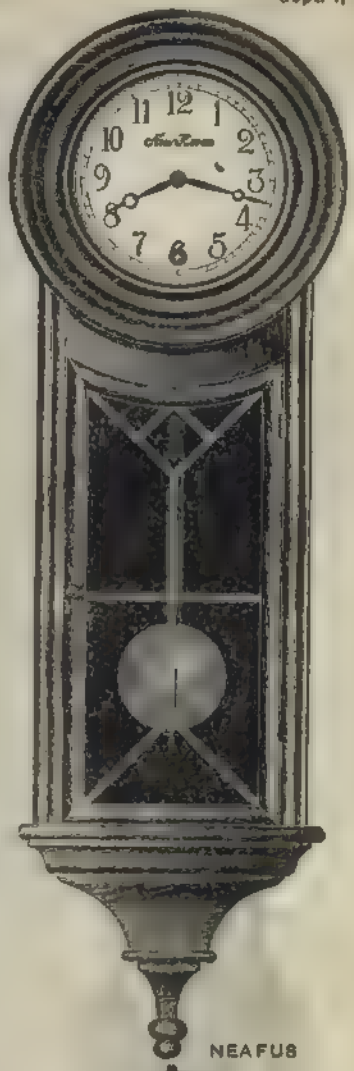
No. 853—Double Swing, Length 20 in..$1.30

Weight 10 Lbs. per Dozen

WALL CLOCKS



MONITOR



NEAFUS

These Clocks are suitable for the Dining Room, Library or Living Room. The Doors are Leaded Glass which gives them a very rich and attractive appearance; the general outside appearance is most pleasing; the movements are carefully made and adjusted for accuracy.

Each

No. 337—Monitor; Solid Mahogany Case; Height 38 in., Width 14¼ in.; 8 in. Porcelain Dial; Eight Day Weight Movement, with Retaining Power $36.25

Weight 70 Lbs. Each

Each

No. 338—Neafus; Height 27¾ in., Width 8½ in.; Case Finished to represent Mahogany; 7 in. Porcelain Dial; French Cast Sash, Beveled Bowed Glass; Eight Day Spring Movement $23.25

Each

No. 339—Saturn; Solid Oak Case, Antique Finish; Height 34¾ in., Width 15¼ in.; 12 in. Dial, 30 Day Movement $16.95

Weight 40 Lbs. Each

Each

No. 340—Elfrida; 30 Day Time; Mahogany Case, Highly Polished; Height 49 in., Width 19 in.; 10 in. Dial..$22.50

Weight 70 Lbs. Each

Each

No. 341—Vamoose, Solid Oak Case, Height 47 in., Width 15¼ in., 10 in. Dial, 30 Day Time $16.00

Weight 40 Lbs. Each

HALL CLOCKS

Eight-Day Weight; Half-Hour Strike, Cathedral Gong

12 in. Etched Metal Dial; Mahogany Cases

SHEFFIELD

Each

No. 445—Height 90½ in., Width 21¾ in.; 12 in. Etched, Metal Dial; Eight-Day Time; Solid Mahogany Case $97.00

Weight 175 Lbs. Each

WELLINGTON

No. 446—Height 88 in., Width 21 in.; 12 in. Etched, Metal Dial; Eight-Day Time; Solid Mahogany Case $119.50

Weight 185 Lbs. Each

WILMINGTON

Each

No. 447—Height 91 in., Width 21½ in.; 12 in. Etched, Metal Dial; Eight-Day Time; Solid Mahogany Case; Wood Top Ornament.....$97.00

Weight 185 Lbs. Each

All Above, One in a Box; Factory Shipment Only

HIGH GRADE OFFICE REGULATORS

These Clocks are Standard in every respect; They are well made and entirely dependable as to Accuracy and Time-Keeping Qualities

SATURN

Each

No. 448—Height 34¾ in., Width 15¼ in.; 12 in. Dial; Eight-Day Time; Special Weight Movement, with Retaining Power; Solid Oak or Mahogany Case $26.40

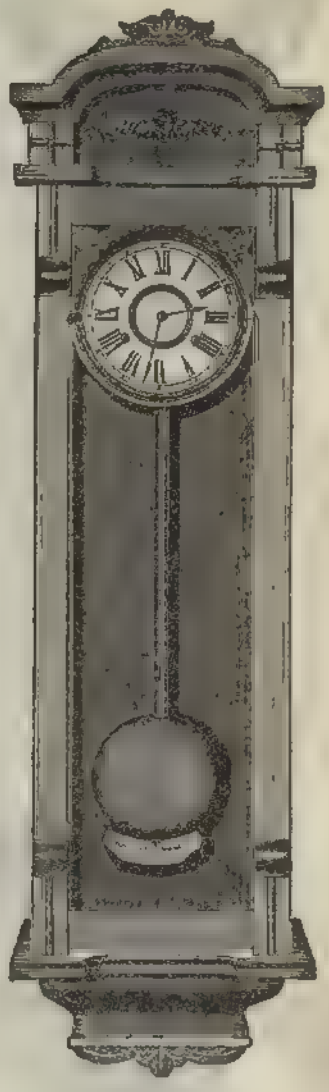
Weight 50 Lbs. Each

STANTON

Each

No. 449—Height 64 in., Width 21 in.; 12 in. Dial; Eight-Day Time; Special Weight Movement, with Retaining Power; Solid Oak or Mahogany Case $62.40

Weight 107 Lbs. Each



COLUMBIA

Each

No. 450—Height 48½ in., Width 14¼ in.; 8 in. Dial; Eight-Day Time; Cathedral Gong; Solid Oak or Mahogany Case $20.70

Weight 55 Lbs. Each

All Above, One in a Box

SCHOOL HOUSE, OFFICE AND KITCHEN CLOCKS

ERIE

Solid Oak Case, Highly Polished and Decorated; Height 33⅛ in., Width 18½ in.; 12 in. Arabic Dial.

Each

No. 63—Eight-Day Time Only. $9 00
No. 62—Eight-Day Time and Calendar 10.50

Weight 23 Lbs. Each

REFEREE

Each

No. 64—Solid Oak Case; Eight-Day Time; Height 35½ in., Width 16 in.; 12 in. Dial.....$8.50

Weight 38 Lbs. Each

DROP OCTAGON

Each

No. 66—Solid Oak Case, Highly Polished; Eight-Day Time; Height 23⅞ in., Width 16½ in.; 12 in. Dial....$8.00

Weight 20 Lbs. Each

ENGINE ROOM OR LEVER CLOCKS

CANTON

Each

No. 67—Eight Day Movement; 8 in. White Dial; Nickel Plated Brass Case and Sash; 11¼ in Diameter at Back.....$7 00
One in a Pasteboard Box; Weight 4 Lbs. Each

WOOD LEVER

Each

No. 68—Eight Day Movement, 8 in. White Dial, Brass Sash. Polished Veneered Oak Case, 11 in Diameter at Back $7.00
One in Pasteboard Box; Weight 5¼ Lbs. Each

WESTINGHOUSE ELECTRIC FAN MOTORS

All Fans, excepting Ceiling Type, Furnished Complete with Cord and Plug

Very desirable for cooling the air in Bed Rooms, Sick Rooms, Offices, etc.; Purifying as well as Ventilating. For the Storekeeper whose show windows are hidden all winter by frost an Electric Fan will be a great benefit

BRACKET OR DESK FANS

DESK FAN

BRACKET FAN

Frames are so constructed that the Fan can be set at any angle; Can either be a Desk or a Bracket Fan; Simple in construction, Neat and Attractive in appearance and operate at low cost; the 12 in. Fan consumes less current than one ordinary 16 Candle Power Incandescent Lamp and the 16 in. Fan less than two 16 Candle Power Incandescent Lamps. Motor is of the Automatic Wick Oiling Type; has two Bearings, and runs practically Noiseless; the Fan, Guard and Oil Cup Nuts are Polished and Lacquered Brass; Three Speeds are obtainable—approximately 1000, 1300 and 1650 Revolutions per minute; Complete with Switch.

ALTERNATING CURRENT FANS, 60 CYCLES

	Each
No. 162628A—100 to 120 Volts, Diameter 12 in., Drawn Steel Frame, Black Enamel Finish, Four Blades	$28 35
No. 162631A—100 to 120 Volts, Diameter 16 in., Drawn Steel Frame, Black Enamel Finish, Four Blades	34 10

Average Shipping Weight, 40 Lbs. Each

DIRECT CURRENT FANS

	Each
No. 162637A—100 to 115 Volts, Diameter 12 in., Drawn Steel Frame, Black Enamel Finish, Four Blades	$25 35
No. 162639A—100 to 115 Volts, Diameter 16 in., Drawn Steel Frame, Black Enamel Finish, Four Blades	29 75

Average Shipping Weight, 40 Lbs. Each

EIGHT-INCH DESK AND BRACKET FANS

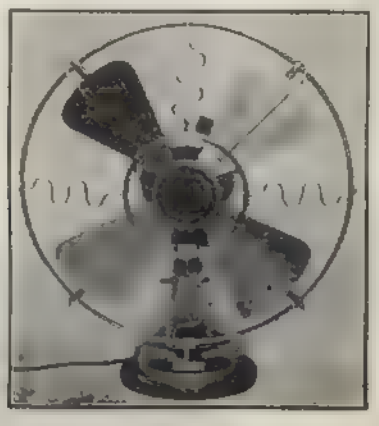
Direct Current; 100 to 125 Volts

Small Size Fan for Desk and Telephone Booth Purposes; Diameter of Fan 8 in.; Drawn Brass Frame

	Each
No. 98927A—Black Enamel Finished Base, Polished Brass Blades and Guards	$17 60

Weight 14 Lbs Each

CROCKER-WHEELER NINE INCH FANS



No. 1914—Diam. 9 in.; 110 Volt, 60 Cycle, Alternating Current, Desk or Bracket Type, Three Speed Regulator; Gun Metal Finish, Brass Trimmed.....$15.00

Weight, Packed, 10 Lbs. Each

OSCILLATING FANS

MECHANICALLY OPERATED OSCILLATING FAN MOTORS

For 60 Cycle, Alternating Current Circuits; 2 Speeds, 100 to 120 Volts

The Oscillating Type Fan Motors are particularly adapted for use in places where it is desired to produce a thorough circulation of air. The Oscillating Device merely consists of a few Auxiliary Parts which are used in connection with slightly modified 12 and 16 inch Desk Fan Motors. Fan Guard and Oil Cup Nuts are Polished and Lacquered Brass.

Drawn Steel Frame, Black Enamel Finish

	Each
No. 164848A—Diameter 12 in., Four Blades	$36 20
No. 164851B—Diameter 16 in., Four Blades	42 10

Average Shipping Weight, 45 Lbs. Each

CEILING FANS

For Factory Shipment Only

Cut shows Alternating Current

With the Mottled Copper Finish Ceiling Fan Motors are furnished a 3 foot stem of Iron Conduit and a corresponding length of Rope Design Brass Stem Casing, finished in Mottled Copper, together with an Insulating Hanger, a Ceiling Hook and Ceiling Canopy. The 3 foot lengths are suitable for 12 foot ceilings. Stems and Stem Casings are not supplied with Black Japan Finish Ceiling Fans, but Black Enamel Canopy, Insulating Hanger and Ceiling Hook are furnished

ALTERNATING CURRENT, FOR 60 CYCLE CIRCUITS

56 in., 4 Blades

MOTTLED COPPER FINISH

No.	Volts	R. P. M. Speeds	Full Speed Watts at	Each
115697-B	100-115	100, 160, 225	150	$61 20
1156972-B	200-230	100, 160, 225	150	63.75

BLACK JAPAN FINISH

115725-B	100-115	160, 225	150	55.45
1157252-B	200-230	160, 225	150	58.20

Shipping Weight, About 94 Lbs. Each

DIRECT CURRENT

56 in., 4 Blades; Mottled Copper Finish

No.	Volts	R. P. M. Speeds	Full Speed Watts at	Each
196120	100-115	100, 150, 200	110	$51.05
1961202	200-230	100, 150, 200	110	53.70

Shipping Weight, 112 Lbs. Each

DUNCAN WATTHOUR METERS

Model E for Direct Currents

HOUSE TYPE

2½-10 Amps.

15-50 Amps.

75-100 Amps.

This Meter is guaranteed to be accurate within 2% throughout its entire range; it belongs to the class known as Direct Current Motor Meters, and depends upon the principle of the well known electro-dynometer for its operation, in which the electro-magnetic action between the current in the field coils and a Revolvable Armature produces motion in the latter. This motion is converted into continuous rotation by the aid of brushes and a commutator—the commutator being connected to the armature coils and carried on the same spindle therewith.

The field coils are traversed by the main current supplied to the translating devices such as lamps, motors, etc., and the armature is energized by a current proportional to the pressure in volts. The magnetic field set up by the field coils and the armature exert at every instant a driving torque that is proportional to the product of both fields, that is, to the amperes multiplied by the volts, or the actual power supplied through the meter in watts.

The torque of the Duncan meter is the highest that has yet been obtained, consequently it retains its accuracy for many years and gives its users unequalled service. Because of its high torque, or power, slight increases of friction will have no appreciable effect. Low torque instruments are always a source of repair expense and reduced revenue because of their slowing down.

The armature of this instrument is wound with No. 40 B. & S. Electrolytic Copper Wire drawn through a diamond die and insulated with the best grade of Italian tram silk. To obtain the greatest possible torque it is wound with 8,000 turns of this wire. After being wound the armature is thoroughly insulated with pure grain alcohol orange shellac, then baked at a moderate heat for ten hours in an electrically heated oven in which an even temperature is maintained.

No element in the construction of a meter requires greater attention than does the making of the retarding magnets; Duncan magnets are made from special Tungsten Steel in strict accordance with a formula owned by the Duncan Electric Manufacturing Co. The proper amounts of Tungsten, Carbon, and Norway Iron are maintained in admixture to a mathematical nicety, and the grain of the metal is very fine, thus giving Duncan magnets great strength and permanency.

All parts are formed from heavy brass under enormous pressure, so that each is absolutely interchangeable, and no dimension varies as much as one thousandth of an inch. The construction is very strong and rigid throughout, making it impossible for parts to get out of alignment. There is nothing in the makeup of the meter that can rust or corrode, as this has been provided against by nickel plating.

A simple and convenient means for compensating for friction and vibration on light loads is provided which consists of a small switch having a number of contact points, each of which is connected to a number of turns in the compensating coil. By moving the small lever of the switch from one contact point to another, more or less of the turns comprising the compensating coil may be brought into circuit, so that the movement of the armature is aided or retarded.

This instrument is extremely easy to install, clean and adjust. It gives long and accurate service.

Amperes	110V to 125V 2 Wire	220V to 250V 2 Wire	500V to 600V 2 Wire	220V to 250V 3 Wire
5	$31 25	$36 25	$46.25	$36 25
7½	.....	35 00	.....	35 00
10	34 00	40 00	51 50	40 00
15	38 50	47 25	60 50	47 25
25	45 00	56 00	71 50	56 00
50	58 25	69 25	88 00	71 50

Amperes	110V to 125V 2 Wire	220V to 250V 2 Wire	500V to 600V 2 Wire	220V to 250V 3 Wire
75	$75 00	$88.00	$104 50	$93 50
100	90 00	102.50	120 00	110 00
150	102.50	118.00	132 50	120 00
200	115 00	135.00	155 00	150 00
300	130.00	150.00	180.00	175.00
400	150.00	170.00	195.00	.....
500	170.00	190.00	205.00	

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DUNCAN WATTHOUR METERS

Model MI for Alternating Currents

HOUSE TYPE

This Meter is provided with a pressed heavy metal cover which receives a semi-dull rubber black finish. The terminals are situated at the bottom, preventing dirt and moisture from settling around the incoming and outgoing wires. Red and black binding post bushings are placed at the entrance to the terminal box to distinguish the line from the load side, so that it would be practically impossible to cause a short circuit by making a wrong connection.

Adjustments are simple and easy to make, the Adjusting Devices being in plain sight at the front of the meter where they are readily accessible; A small Direction Plate clearly explains their use; This Plate bears an arrow which points to "F" (fast), and another which point to "S" (slow), it also distinguishes the light and full load devices so that no one would attempt to make full load adjustments by manipulating the light load device.

A very high driving torque is developed by the Duncan Model "M1," so that the effects of friction are inappreciable; Long time accuracy is assured by the use of an extremely long magnet, for it is a well known fact that one long Magnet having only one air gap will last much longer than two small Magnets, since its reluctance (or magnetic resistance) will be less; The design of the Meter is such that the Magnet is not effected by short circuits even though the line is improperly fused.

The jewel assembly consists of four parts—the Jewel Housing, the Oriental Sapphire itself set in a small mounting, a non-corrosive spiral spring (which takes up excessive jars) and a Cap which holds the Jewel down against the spring; If, after a few years of service, a Jewel becomes rough or worn, it is only necessary to replace the Jewel itself, an operation which merely involves the removal of the Cap, taking out the old Jewel and putting in a new one. This makes the replacement of Jewels less expensive than in the case of designs necessitating the throwing away of the entire Jewel Element as soon as the Jewel is worn out.

The Phasing Device consists of a copper plate which surrounds the laminations of the potential core and which is capable of adjustment in a vertical direction. This flat piece of copper is adjusted in the laboratories of the Duncan Company so that the Meter will accurately measure the energy supplied to all kinds of loads, be they inductive, non-inductive or mixed, and whether they contain capacity or not; Once the Phasing Device has been set at the factory it need never be altered.

110 Volts—2 Wire 60 Cycles		220 Volts—2 Wire 60 Cycles		440 Volts—2 Wire 60 Cycles		220 Volts—3 Wire 60 Cycles		1100 or 2200 Volts—3 Wire 60 Cycles	
Amperes	Each	Amperes	Each	Amperes	Each	Amperes	Each	Amperes	Each
5	$ 15 42	5	$ 17 [illegible]	5	$ 22 [illegible]	5	$ 17 33	5	$ 70 00
10	17.73	10	19 [illegible]	10	28 75	10	19 80	10	72 00
15	20.42	15	22 [illegible]	15	32 25	15	22 [illegible]	15	74 00
25	24 70	25	27 [illegible]	25	38 [illegible]	25	27 [illegible]	25	78 00
50	33 27	50	36 [illegible]	50	46 00	50	36 [illegible]	50	81 00
75	38 95	75	41.80	75	52 00	75	41 80	75	84 00
100	43 0[illegible]	100	48 [illegible]	100	57 00	100	48 0	100	87 00
150	57 0[illegible]	150	58 [illegible]	150	67 00	150	58 0	150	95 00
200	6[illegible]	200	69 [illegible]	200	72 00	200	6[illegible] 0	200	1[illegible] 0 0
300	55 0[illegible]	300	69 00	300	78 00	300	69 [illegible]	300	1[illegible] 00
400	72 5[illegible]	400	76 [illegible]	400	85 [illegible]	400	76 [illegible]	400	122 0[illegible]
500	80 00	500	84 [illegible]	500	94 00	500	84 00	500	1[illegible] [illegible]
600	87 5[illegible]	600	91 0[illegible]	600	101 00	600	91 [illegible]	600	1[illegible] [illegible]
800	100 0[illegible]	800	105 0[illegible]	800	115 00	800	205 0[illegible]	800	150 00
1000	115 0[illegible]	1000	120 00	1000	130 00	1000	120 0	1000	160 0[illegible]

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Marshall-Wells Hardware Co.

DUNCAN WATTHOUR METERS

Model HC for Direct Currents

Model HP for Direct Currents

Model MT for Alternating Currents

PORTABLE TEST TYPES

Model HC for Direct Currents

Top View Model HC

Model MT for Alternating Currents

Model HC—This Meter is designed in strict accordance with the requirements of central station practice, and is made as simple as possible in its operation; The employment of Plugs and Switches for adapting the windings of its series field coils to the various loads has been entirely eliminated and the complete operation reduced to simply turning the pointer of a controller type switch to the desired load as indicated on the ampere dial. This avoids the possibility of making mistakes, and insures great accuracy and speed in testing; Each load gives maximum torque so that the elements of friction and inertia are entirely overcome; Since the pointers are of the fly-back type, each run may be started from zero reading, thus avoiding the necessity of subtracting one reading from another; When a run has been made the pressing of a small push button at the front of the instrument brings all the pointers back to zero.

Model MT—Although the Models "H. C." and "H. P." will operate correctly on alternating current circuits, their use for such work is not recommended as the induction type of watt hour meter is preferable for the measurement of "A. C." power. The Model "M. T." combines the good points of the Duncan Model "M" induction type meter with those of the Model "H. C." rotating standard. It is equipped with the convenient controller switch, ampere dial, and fly-back pointers. Its accuracy may be depended upon under all conditions of load and power factor.

Model HP This Meter is provided with Fly-Back Pointers and is similar to the Model "H. C." except that plugs are used to change the meter from one capacity to another, instead of the more convenient method used in the Model "H. C."

MODEL HC

Amperes	Volts	Each
1-2-5-10-25-50	110	$212 50
1-2-5-10-25-50	220	225 00
1-2-5-10-25-50	500	237.50
1-2-5-10-25-50	110-220	250.00
1-2-5-10-25-50	110-500	257.50
1-2-5-10-25-50	220-500	262.50
1-2-5-10-25-50	110-220-500	275 00
5-10-25-50-100	110	237 50
5-10-25-50-100	220	250.00
5-10-25-50-100	500	262 50
5-10-25-50-100	110-220	275 00
5-10-25-50-100	110-500	282.50
5-10-25-50-100	220-500	287.50
5-10-25-50-100	110-220-500	300.00

MODEL HP

Amperes	Volts	Each
2½-5-10-20	110	$175.00
2½-5-10-20	220	187.50
2½-5-10-20	500	200.00
2½-5-10-20	110-220	212.50
2½-5-10-20	110-500	220.00
2½-5-10-20	220-500	225.00
2½-5-10-20	110-220-500	237.50

MODEL MT

Amperes	Volts	Each
2½-5-10-20	110	$150 00
2½-5-10-20	220	162 50
2½-5-10-20	440	175.00

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WINCHESTER AUTOMATIC RIFLES

TAKE-DOWN, HAMMERLESS

The Shooter has simply to pull and release the trigger and the recoil from the exploded shell operates the mechanism, which ejects the empty shell and raises a loaded one from the magazine into the chamber, cocks the hammer and makes the gun ready to fire again. The Trigger Finger has complete control over the rifle and it is unnecessary to take the eye off the sights when shooting rapidly. A Positive Trigger Lock allows the carrying of the Rifle at full cock with safety. The Self-Loading System is strong, positive and reliable without the complication and trouble of unnecessary or protruding parts to catch on clothing and brush. The Take-Down System consists of a Screw at the rear of Receiver, a few turns of which separates the Rifle into two parts, making it easily accessible for cleaning.

AUTOMATIC MODEL 1903

A 10 Shot Rifle adapted to a new 22 Caliber, Rim Fire High Pressure, Smokeless Cartridge. Magazine is loaded through hole in stock.

20 in. Round, Blued Steel Barrel, Fitted with Open Front and Rear Sights, Blued Steel Frame and Trimmings; Walnut Forearm and Rifle Butt Stock.

	Each
No. 1903—22 Winchester Automatic Caliber, Rim Fire	$27 00

Weight about 5¼ Lbs. Each

Note.—This rifle is chambered for the 22 Caliber, Winchester Automatic Cartridge, and no other 22 Caliber Cartridge can be used.

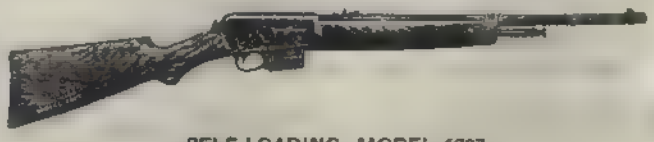
SELF-LOADING, MODEL 1905

A 6 Shot Self-Loading (or Automatic) Rifle made in 32 and 35 Winchester Self-Loading Calibers. The magazine is of the box type and is pulled out to load. If rapid reloading is required, extra magazines can be carried in the pocket, loaded and ready to replace an exhausted one.

22 in. Round Blued Steel Barrel; Fitted with Sporting Front and Rear Sights; Blued Steel Frame and Trimmings; Walnut Forearm and Shot Gun Butt Stock, Rubber Butt Plate.

	Each
†No. 1905—32 Winchester Self-Loading Caliber, Center Fire	$29 50
†No. 32M—Extra Magazine for above	2 00
†No. 1935—35 Winchester Self-Loading Caliber, Center Fire	29 50
†No. 35M—Extra Magazine for above	2 00

Weight about 7½ Lbs. Each



SELF-LOADING, MODEL 1907

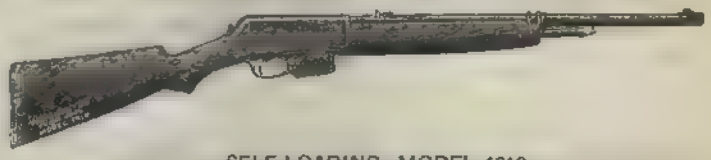
A 6 Shot Self-Loading (or Automatic) Rifle made in 351 Caliber and using a Special Cartridge which is sufficiently powerful for the biggest game. The Cartridge is loaded with a 180 Grain Bullet and a new Special Powder, giving great Velocity and Penetration, and making this arm a strictly high power, big game Rifle. The magazine is of the box type, and is pulled out to load. If rapid reloading is required, extra magazines can be carried in the pocket, loaded and ready to replace an exhausted one.

20 in. Round Nickel Steel Barrel, Fitted with Sporting Front and Rear Sights; Blued Steel Frame and Trimmings, Walnut Forearm, Pistol Grip, Shot Gun Butt Stock, Rubber Butt Plate.

	Each
No. 351—351 Winchester Self-Loading Caliber, Center Fire	$32 00

Weight about 7¾ Lbs. Each

No. 351M—Extra Magazine for above	2 00



SELF-LOADING, MODEL 1910

A 5 Shot Self-Loading (or Automatic) Rifle; Shoots a Heavier Bullet and a Harder Hitting Cartridge than the .30 U. S. Army; Handles either 200 or 250 grain bullets without change or re-adjustment. Barrel, Receiver, Guard and Working Parts are made of Nickel Steel which gives the necessary strength and elasticity to withstand the strain of the heavy cartridge. The Detachable Magazine makes it unnecessary to work unused cartridges through the action when unloading. Extra loaded Magazines may be carried in pocket allowing rapid reloading and interchanging of different weight cartridges.

20 in. Round Nickel Steel Barrel, Fitted with Sporting Front and Rear Sights; Plain Walnut Pistol Grip Stock and Forearm.

	Each
No. 401—401 Winchester Self-Loading Caliber, Center Fire	$38 00

Weight about 8¼ Lbs. Each

No. 401M—Extra Magazine for above	2 00

FANCY FINISHED, SELF-LOADING, MODEL 1910

Selected, Highly Polished Walnut Stock and Forearm, Checkered; Shot Gun Butt Stock, with Full Pistol Grip, Rubber Butt Plate; Action and other Fittings same as described on No. 401, shown above.

	Each
†No. 401F—401 Winchester Self-Loading Caliber Center Fire (See No. 401M above for Extra Magazines)	$58 50

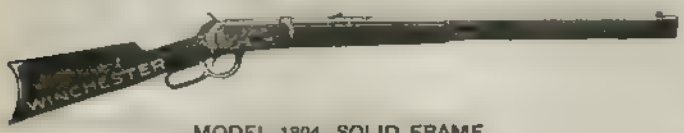
Weight about 8½ Lbs. Each

†Not Carried in Stock. Can only be Furnished by Shipping Direct from Factory.

For Component Parts of these Rifles, see pages 2964 2965; For Extras, see page 2908. For Special Sights, see pages 2936-2937. Cleaning Rods 3030-3032. Ammunition 3008-3018.

WINCHESTER REPEATING RIFLES AND CARBINES

The Model 1894 is the most popular of all Winchester Models; made light in weight, and in a variety of Calibers, suitable for all purposes The Action is operated by the Finger Lever, one forward and backward throw will eject the empty Cartridge, raise a loaded one from the Magazine into the Chamber, close and lock the Breech, cock the Hammer, and make the Gun ready to fire again. To load the Magazine, press the Cartridges in Slot shown in Frame.



MODEL 1894, SOLID FRAME

All have 26 in. Barrel, Blued Frame, Case Hardened Lever, Walnut Forearm and Rifle Butt Stock, Steel Butt Plate; Center Fire.

26 in. Plain Steel Barrel

	Each
No. 040—32-40 Cal., Octagon Steel Barrel, 9 Shot..	$21 00
No. R40—32-40 Cal., Round Steel Barrel, 9 Shot..	19 50
No. 041—38-55 Cal., Octagon Steel Barrel, 9 Shot..	21 00
No. R41—38-55 Cal., Round Steel Barrel, 9 Shot	19 50

Average Weight 8 Lbs. Each

26 in. Nickel Steel Barrel

	Each
No. 042—25-35 Cal., Octagon Nickel Steel Barrel, 9 Shot..	$26 50
No. 043—30 Cal., Octagon Nickel Steel Barrel, 9 Shots	26 50
No. R43—30 Cal., Round Nickel Steel Barrel, 9 Shots	25 00
No. 044—32 Special Cal., Octagon Nickel Steel Barrel, 9 Shots	26 50
No. R44—32 Special Cal., Round Nickel Steel Barrel, 9 Shots.	25 00

Average Weight; Octagon Barrel, 8 Lbs.; Round Barrel, 7½ Lbs., Each

MODEL 1894, TAKE-DOWN

This Rifle can be easily and quickly taken apart; Otherwise same as Solid Frame Guns described above.

26 in. Octagon Nickel Steel Barrel

	Each
No. 0436—30 Cal., 9 Shot.	$32 00

Weight about 8 Lbs. Each

MODEL 1895, BOX MAGAZINE

A 5 or 6 Shot Box Magazine, Lever Action, Repeating Rifle, simple in construction and positive in action; The Box Magazine feature of this Rifle, has the advantage of eliminating any danger of jamming the cartridges. Action is operated by the Finger Lever, one forward and backward throw will eject the empty cartridge, raise a loaded one from the Magazine into the Chamber, close and lock the Breech, cock the Hammer and make the Gun ready to fire again. To Load the Magazine, throw forward the Finger Lever, this opens the Breech and exposes the Magazine, then press in the Cartridges.

MODEL 1895, BOX MAGAZINE, SOLID FRAME

Blued Frame and Lever, Walnut Forearm and Rifle Butt Stock, Steel Butt Plate, Sporting Front and Rear Sights, Round Nickel Steel Barrel, Center Fire. Do not use Black Powder in Cartridges.

	Each
No. R50—30 U. S. Army Cal., 28 in. Barrel; 6 Shot.	$34 50
No. R51 30 Model 1903 Cal., Rimless, 24 in. Barrel, 5 Shot.	34
No. R1906—30 Model 1906 Cal., Rimless, 24 in. Barrel, 5 Shot.	34 50

Weight 8½ Lbs. Each

MODEL 1895, BOX MAGAZINE, TAKE-DOWN

Same as above except frame which is Take-Down in place of Solid.

	Each
No. R506—30 U. S. Army Cal., 28 in. Barrel; 6 Shot.	$37 00
No. R516—30 Model 1903 Cal., Rimless, 24 in. Barrel; 5 Shot.	37.00

Weight 8¾ Lbs. Each

MODEL 1895, BOX MAGAZINE, SOLID FRAME, CARBINE

22 in. Round Nickel Steel Barrel, Blued Frame with Sling Ring on Left Side, Blued Lever Walnut Forearm and Butt Stock; Steel Carbine Butt Plate; Holds 6 Shots.

	Each
No. R54—30 U. S. Army Cal.	$34 50

Weight 8 Lbs. Each

MODEL 1894, CARBINE

20 in. Round Steel Barrel, Blued Frame with Sling Ring on Left Side; Case Hardened Lever; Walnut Forearm and Butt Stock, Steel Carbine Butt Plate; Holds 7 Shots; Center Fire.

With Plain Steel Barrel

	Each
No. R45—32-40 Cal.	$19 00
No. R46—38-55 Cal.	19 00

Weight 6¼ Lbs. Each

With Nickel Steel Barrel

No. R47—25-35 Cal.	$23 00
No. R48—30 Cal.	23 00
No. R49—30 Cal., with Sling Strap and Swivels.	25 50
No. R410—32 Special Cal.	23 00

Weight 6½ Lbs. Each

For Component Parts see pages 2965-2966, For Extras, see page 2908, For Special Sights, see pages 2936-2937; Cleaning Rods 3030-3032 Ammunition, 3008-3018.

WINCHESTER REPEATING RIFLES

The Model 1886 is a Large Caliber, High Power, Repeating Rifle, suitable for Big Game Hunting. The Action is operated by the Finger Lever; one forward and backward throw will eject the empty Cartridge, raise a loaded one from the Magazine into the Chamber, close and lock the Breech, cock the Hammer and make the Gun ready to fire again. To load the Magazine, press Cartridge into Slot shown in side of Frame.

Illustration Shows Rifle Butt Stock, Full Magazine

MODEL 1886, SOLID FRAME

24 in. Round, Nickel Steel Barrel; Blued Frame, Case Hardened Lever; Walnut Forearm and Butt Stock; Center Fire.

With Rifle Butt Stock, Steel Butt Plate

	Each
No. R60—33 Cal., Full Magazine, 8 Shots	$28 50
No. R61—33 Cal., Half Magazine, 5 Shots	28 50

With Shot Gun Butt Stock, Rubber Butt Plate

	Each
No. R62—33 Cal., Full Magazine, 8 Shots	$28 50
No. R63—33 Cal., Half Magazine, 5 Shots	28 50

Weight about 7¼ Lbs. Each

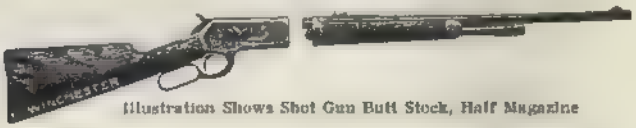


Illustration Shows Shot Gun Butt Stock, Half Magazine

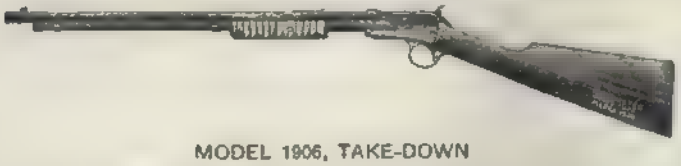
MODEL 1886, TAKE-DOWN

24 in. Round, Nickel Steel Barrel; Blued Frame, Case Hardened Lever; Walnut Forearm and Butt Stock; Center Fire.

With Shot Gun Butt Stock, Rubber Butt Plate

	Each
No. R626—33 Cal., Full Magazine, 8 Shots	$34 50
No. R636—33 Cal., Half Magazine, 5 Shots	34 50

Weight about 7¾ Lbs. Each



MODEL 1906, TAKE-DOWN

Light Weight Repeating Rifle; Chambered for 22 Short, 22 Long or 22 Long Rifle Rim Fire Cartridges. The Action is operated by the sliding forearm, one backward and foreward movement will eject the empty shell, raise a loaded one into the chamber, cock the hammer and make the rifle ready to fire again. To Load, pull out milled head Magazine Tube, this will expose loading hole and cartridges can be dropped into Magazine.

20 in. Round Barrel Adjustable Open Rear and Sporting Front Sights; Blued Finish; Walnut Forearm and Stock, Rubber Butt Plate; Holds Fifteen 22 Caliber Short and Twelve 22 Caliber Long or Eleven Long Rifle Cartridges.

	Each
No. 1906—For 22 Cal. Short, 22 Cal. Long and 22 Cal. Long Rifle	$15 50

Ten in a Case; Weight 5 Lbs. Each

The Model 1892 is a Light, Strong, Serviceable Rifle, using Low Pressure Cartridges. The Action operates the same as Model 1886 described on left side of this page.

MODEL 1892, SOLID FRAME

24 in. Plain Steel Barrel, Blued Frame, Case Hardened Lever; Walnut Forearm and Rifle Butt Stock; Steel Butt Plate; Holds 14 Shots; Center Fire.

	Each
No. 020—25-20 Cal., Octagon Barrel	$21 00
No. R20—25-20 Cal., Round Barrel	19 50
No. 021—32 W. C. F. Ca., Octagon Barrel	21 00
No. 022—38 W. C. F. Ca., Octagon Barrel	21 00
No. R22—38 W. C. F. Cal., Round Barrel	19 50
No. 023—44 W. C. F. Cal., Octagon Barrel	21 00

Weights: Octagon Barrel 7 Lbs.; Round Barrel 6¾ Lbs. Each

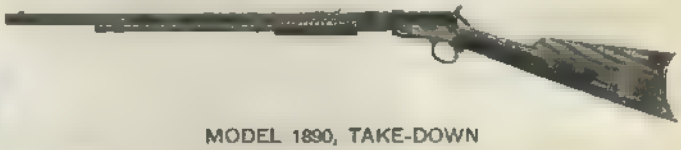
MODEL 1892 SOLID FRAME CARBINE

20 in. Round Plain Steel Barrel; Blued Frame, with Sling Ring on Left Side; Case Hardened Lever; Walnut Forearm and Butt Stock, Steel Carbine Butt Plate; Holds 12 Shots; Center Fire.

	Each
No. R24—25-20 Caliber	$19.00
No. R25—32 W. C. F. Caliber	19 00

Weight 5¾ Lbs. Each

The following Cartridges are Interchangeable—32 W. C. F. with 32-20; 38 W. C. F. with 38-40; 44 W. C. F. with 44-40.



MODEL 1890, TAKE-DOWN

Action and mode of loading are the same as Model 1906 described on left of this page.

24 in. Octagon Barrel; Adjustable Open Rear and Open Front Sights; Blued Finish; Walnut Forearm and Stock; Steel Rifle Butt Plate.

	Each
No. 9022S—22 Caliber Short, Holds 15 Shots	$17.50
No. 9022L—22 Caliber Long, Holds 12 Shots	17 50
No. 9022W—22 Caliber W. R. F., Holds 12 Shots	17.50

Ten in a Case; Weight 5¾ Lbs. Each

22 Caliber W. R. F. is Commonly known as 22 Special

Longer Barrels than 24 in. cannot be furnished in Model 1890, nor over 20 in. in Model 1906.

WINCHESTER SINGLE SHOT RIFLES

Chambered for B. B. Caps, 22 Short, Long or Long Rifle, Rim Fire Cartridges, Bolt Action, Automatic Ejector, which throws the shell entirely out of the Receiver; Highly Finished Fore-Arm and Stock, Steel Butt Plate.

MODEL 1902

18 in. Round Barrel; Length Over-all 33¼ in.; Open Front and Rear Sights

	Each
No. 1902—22 Caliber	$5.50

Ten in a Case, with Cleaning Rod; Weight 3 Lbs. Each

MODEL 1904

21 in. Round Barrel; Length Over-all 37½ in.; Bead Front and Adjustable Rear Sights

	Each
No. 1904W—22 Caliber	$7 25

Ten in a Case, with Cleaning Rod. Weight 4 Lbs. Each

For Component Parts of Winchester Rifles, See Page 2979

SINGLE SHOT RIFLES

STEVENS IMPROVED FAVORITE (No 27)

24 in. Full Octagon Barrel; Rocky Mountain Front and Sporting Rear Sights Blued Frame, Lever Action, Walnut Fore-Arm and Stock, Rubber Butt Plate

Each

No. 2722—22 Caliber, R. F., Automatic Ejector, for B. B. Caps, 22 Short, Long or Long Rifle, Rim Fire Cartridges $9 00

No. 2722W—22 W. R. F. Caliber, Automatic Ejector, for 22 Winchester, Rim Fire Cartridges 9 00

No. 2725S—25 Caliber, R. F., Chambered for 25 Stevens Short and 25 Stevens, Rim Fire Cartridges 9 00

No. 2732S—32 Caliber, R. F., Chambered for 32 Short, Long or Long Rifle, Rim Fire Cartridges 9.00

One in a Box, with Cleaning Rod; Weight 4½ Lbs. Each

STEVENS FAVORITE (No. 17)

24 in. Half Octagon Barrel; Rocky Mountain Front and Rear Sporting Sights, Blued Frame; Lever Action; Walnut Fore Arm and Stock; Rubber Butt Plate.

Each

No. 1722—22 Caliber, R. F.; Automatic Ejector, for B. B. Caps, 22 Short, Long or Long Rifle Rim Fire Cartridges $8 00

One in a Box, with Cleaning Rod, Weight 4½ Lbs Each

STEVENS MARKSMAN (No. 12)

20 in. Round Tip-Up Barrel; Bead Front and Open Rear Sights; Blued Frame, Plain Lever, Positive Extractor, Full Oval Stock; Shot Gun Butt with Rubber Butt Plate.

Each

No. 1222—22 Caliber, R. F., for B. B. Caps, 22 Short, Long or Long Rifle Cartridges $7.00

No. 1225—25 Caliber, R. F., Chambered for 25 Stevens Short and 25 Stevens Rim Fire Cartridges 7.00

One in a Box with Cleaning Rod; Weight 4 Lbs. Each

STEVENS LITTLE SCOUT

18 in. Round Barrel; Open, Rear and German Silver Front Sights, Varnished regulation Rifle Stock and Fore Arm, Case Hardened Frame, Positive Horizontal Extractor, Breech Block drops down when Cartridge is to be inserted or empty shell extracted

Each

No. 14½—22 Caliber, R. F., Chambered for BB Caps, 22 Short, Long or Long Rifle, Rim Fire Cartridges $4.25

One in a Box, with Cleaning Rod, Weight 2¾ Lbs Each

STEVENS CRACK SHOT (No. 26)

18 in. Round Barrel; Blued Frame, Lever Action; Oval Stock; Carbine Butt Plate, Knife Blade Front and Open Rear Sights. Especially designed for the use of Smokeless Powder Cartridges, This Rifle will not blow back and will not spit fire; No injury to the face or eyes can occur from any cause.

Each

No. 26—22 Caliber, R. F.; Chambered for C. B. Caps, 22 Short, Long or Long Rifle Cartridges $5.25

One in a Box, with Cleaning Rod, Weight 3¼ Lbs. Each

SAVAGE JUNIOR, MODEL 1904

18 in. Round Barrel; Open Front and Rear Sights; Walnut Fore Arm and Stock, Steel Butt Plate; Bolt Action; Automatic Ejector, which throws the shell entirely out of the Receiver, Receiver is grooved so that by dropping in a cartridge and closing the Bolt the cartridge is forced into the Chamber, the Closing of Bolt also Cocks the Hammer.

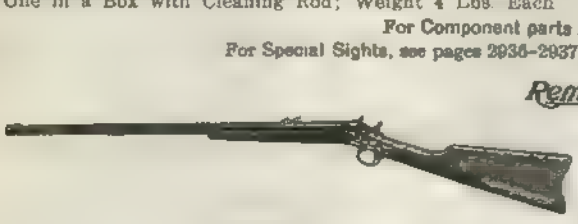
Each

No. 1904—22 Caliber; Chambered for 22 Caliber Short, Long or Long Rifle, Rim Fire Cartridges $5.50

For Component parts for above Rifles, see pages 2974–2975

For Special Sights, see pages 2936–2937; Cleaning Rods, 3030–3032; Ammunition, 3008–3018

Remington-UMC



MODEL 4

Chamber for 22 Short, Long or Long Rifle, Rim Fire Cartridges, 22¾ in. Octagon Barrel Open Front Sight and New Design, Sporting Rear Sight, with Elevator; Remington Side Lever Action, Automatic Ejector, Case Hardened Frame, Walnut Fore-Arm and Stock Steel Butt Plate.

Each

No. 422—22 Caliber $8.50

One in Box, with Cleaning Rod, Ten in Case; Weight 4¼ Lbs. Each

MODEL 6

Chambered for B. B. Caps, 22 Caliber Short, Long or Long Rifle, Rim Fire Cartridges, 20 in. Round Barrel, Open Front and Tang Peep Rear Sights, Remington Side Lever Action, Case Hardened Frame, Walnut Fore Arm and Stock, Steel Butt Plate.

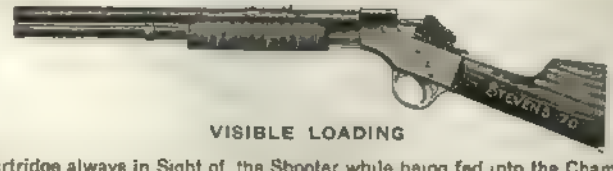
Each

No. 6—22 Caliber $6.50

One in Box, with Cleaning Rod; Ten in Case; Weight 3½ Lbs. Each

For Component Parts of Remington Rifles, See Page 2978

STEVENS REPEATING RIFLES



VISIBLE LOADING

The Visible Loading Feature keeps the Cartridge always in Sight of the Shooter while being fed into the Chamber, this Particular Point alone will appeal to every Sportsman

20 in. Round Barrel, Varnished Stock and Slide Handle, Case Hardened Frame, Rubber Butt Plate; Magazine Tube and Breech Block are in one Piece; Extra Strong Double Extractors makes the removal of the Empty Shell absolutely positive, the Breech Block has a Positive Lock and is operated by the Slide Handle after it is closed; the Hammer also has a Positive Lock and is always locked, while the Breech Lock is unlocked.

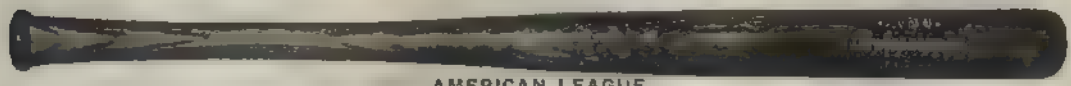
Each

No. 70L—For 22 Short, 22 Long and 22 Long Rifle Cartridges $13.00

One in a Box with Cleaning Rod; Weight 4½ Lbs. Each

ZENITH BASE BALL BATS

These Bats Are Not Guaranteed



AMERICAN LEAGUE

State Model Wanted, either Eddie Collins, Model 3, Frank Baker, Model 6; Hans Wagner, Model 7; or Ty Cobb, Model 9

Per Dozen

No. 200—Hand Turned from Selected Ash, Plain Handle, Flame Burnt Shellac Finish, Highly Polished, Lengths from 32 to 36 in. $15 00

One Dozen in a Crate; Weight 37 Lbs. per Dozen

HOME RUN

Per Dozen

No. 150—Finest Quality Second Growth White Ash; Golden Flame Burnt Finish, Transfer Branded; Lengths from 32 to 36 in.....$12.00

One Dozen in a Crate; Weight 37 Lbs. per Dozen

SAFE HIT

An All Around Standard Model

Per Dozen

No. 100—Good Quality Second Growth, Straight Grained Ash Golden Oil Tempered Finish, Lengths from 32 to 36 in $10 00

One Dozen in a Crate; Weight 37 Lbs. per Dozen

BLACK BEAUTY; Tape Wound Handle

Per Dozen

No. 100B—Good Quality Second Growth Ash, Finished with a Dark Brown, Rubbed in Stain within 12 in. of the Top; Handle shows Prime White Stock; Tape Winding gives firm Grip; Lengths from 32 to 36 in.....$9.00

One Dozen in a Crate; Weight 37 Lbs. per Dozen

FUNGO

A Light Weight Willow Bat of Big League Caliber; Especially adapted for Practice Work or for Amateur Base Ball Clubs

Per Dozen

No. 100F—Good Quality Willow, Golden Oak Finish; Lengths 34 to 36 in. $9.00

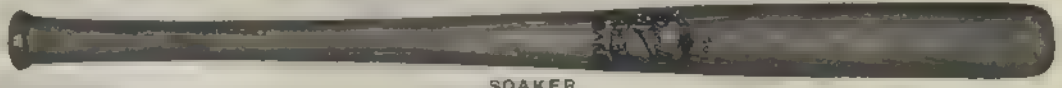
One Dozen in a Crate; Weight 37 Lbs per Dozen

HARD HITTER; Tape Wound Handle

Per Dozen

No. 70—Fine Quality, Straight Grained Ash, Flame Burnt, Hardened Surface, Tape Winding gives firm Grip; Lengths from 34 to 36 in.$8 00

One Dozen in a Crate; Weight 37 Lbs. per Dozen



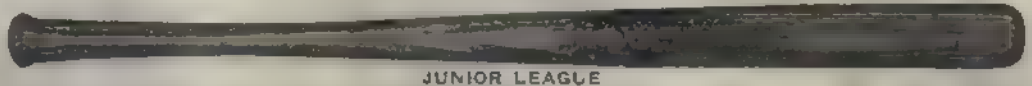
SOAKER

A Full Sized Man's Bat of Standard Model, Slugger Pattern

Per Dozen

No. 50—Second Selection of White Ash Flame Burnt and Highly Polished, Lengths from 34 to 36 in $6.00

One Dozen in a Crate; Weight 37 Lbs per Dozen



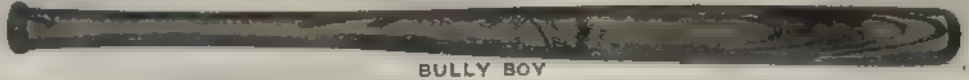
JUNIOR LEAGUE

For Youths and Boys; Carefully Turned and Evenly Balanced

Per Dozen

No. 50J—Made of Ash, Flame Burnt Finish, Highly Polished; Length 32 in. $4.00

One Dozen in a Crate; Weight 26 Lbs. per Dozen

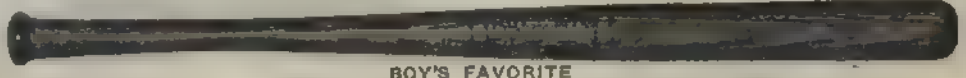


BULLY BOY

Per Dozen

No. 30—Made of Ash, Flame Burnt and Polished; Length 30 in. $3 00

One Dozen in a Crate; Weight 23 Lbs. per Dozen



BOY'S FAVORITE

Per Dozen

No. 20—Made of Hardwood, Yellow Finish with Black Stripe; Length 30 in.....$2.00

One Dozen in a Crate; Weight 21 Lbs. per Dozen

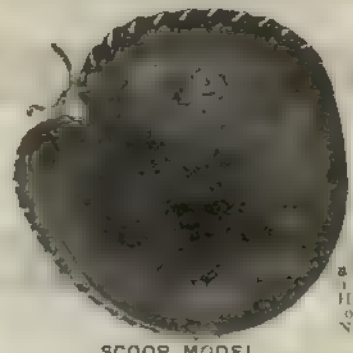
ZENITH CATCHERS' MITTS

RIMLESS MODEL

This is a perfect Professional Catchers Mitt, made on Scientific Principles and is readily broken in. Per Dozen

No. M1800—Highest Quality, First Selection, Russet French Calf Skin; Tan Leather Welt running all around the Edges; Green Leather Binding, Double Stitched throughout with White Linen Thread, Thumb and last Finger are Thong Laced to Rim; Best Quality Asbestos Felt Padding, Hand Formed and Stitched; Full Laced Edge Rim; Extended Felt Lined Chafe under Buckle; Width 10 in., Length 10½ in..... $108.00

Weight 15 Lbs per Dozen



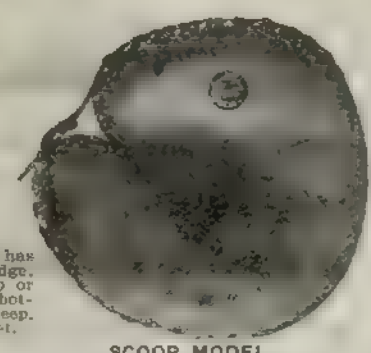
This Model has a very thin edge, a large Hump or Heel at the bottom gives a deep, Natural Pocket.

SCOOP MODEL

Per Dozen

No. M1600—Finest Quality Black Calf Skin; Tan Leather Welt on Edge Band; Tan Leather Binding, Stitched throughout with Orange Linen Thread; Thumb and last Finger are Thong Laced to Edge; Best Quality Asbestos Felt Padding, Hand Formed and Stitched; the Back is Leather Lined; Full Laced Edge Rim; Extended Felt Lined Chafe under Buckle; Width 10 in., Length 10½ in $96 00

Weight 18 Lbs per Dozen

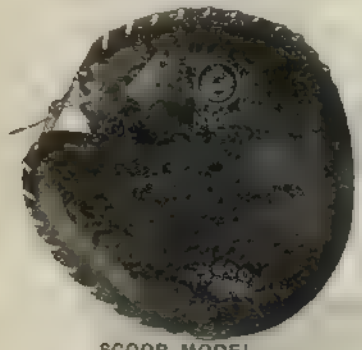


SCOOP MODEL

Per Dozen

No. M1200—Genuine Calf Skin, Extra Color; Green Leather Welt on Edge Band Green Leather Binding, Tan Horsehide Leather Lace; Stitched throughout with Black Thread; Thumb and last Finger are Thong Laced to Edge; Best Quality Asbestos Felt Padding, Hand Formed and Stitched; the Back is Leather Lined, Full Laced Edge Rim; Extended Felt Lined Chafe under Buckle, Width 10 in., Length 10½ in..... $72 00

Weight 18 Lbs. per Dozen



SCOOP MODEL

Per Dozen

No. M1000—Finest Quality Brown Colored Calf Skin Palm and Fingers; Heavy Oak Mitten Leather Back; Black Leather Welted Seams; Black Leather Binding; Asbestos Felt Padding; Thumb and last Finger are Thong Laced to Edge, Full Laced Edge Rim; Extended Felt Lined Chafe under Buckle; Width 10 in., Length 10½ in.....$60.00

Weight 18 Lbs. per Dozen

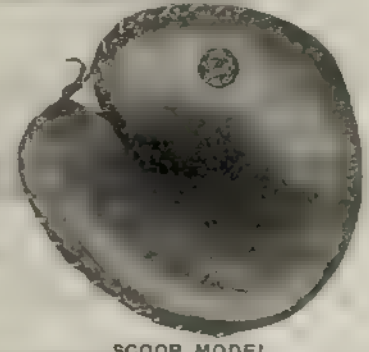
EXPERT MODEL

This Model is of uniform thickness throughout and is very light. It is approved by Great Ball Players; Has deep, Natural Pocket.

Per Dozen

No. M600—Finest Quality Pearl Colored Calf Skin Palm and Fingers; Heavy Black Mitten Leather Band. Double Stitched; Tan Leatherette Binding; Heavy White Woven Lace; Full Laced Rim; Stitched throughout with White Linen Thread; Palm is correctly Padded, Strap and Buckle Fastening; Width 10 in., Length 10 in.....$36.00

Weight 15 Lbs per Dozen

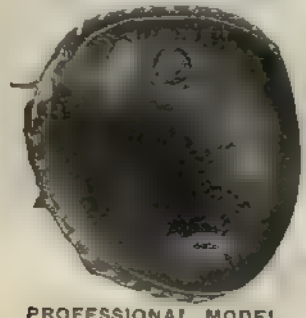


SCOOP MODEL

Per Dozen

No. M800—Finest Quality Pearl Colored Calf Skin Palm and Fingers; Heavy Oak Mitten Leather Back; Tan Leather Welted Seams; Tan Leather Binding, White Rawhide Lace, Black Thread Stitched throughout, Asbestos Felt Padding, Thumb and last Finger are Thong Laced to Edge; Full Laced Edge Rim, Lined Chafe under Buckle; Width 10 in., Length 10½ in.....$48.00

Weight 15 Lbs. per Dozen



PROFESSIONAL MODEL

Per Dozen

No. M500—Selected Black Calf Skin Palm and Fingers; Heavy Oak Mitten Leather Back and Band; White Leather Welt on Edge Band; Red Leatherette Binding throughout Full Laced Rim; Strap and Buckle Wrist Fastening; Width 10 in., Length 10 in.....$30.00

Weight 15 Lbs. per Dozen

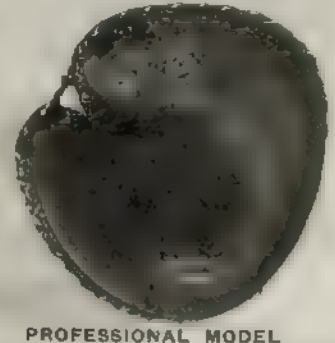
SEMI-PRO MODEL

Per Dozen

No. M350B—Finest Quality, Heavy, Black, Genuine Alco Leather; Tan Leather Welt Edge Band, Triple Stitched with Orange Colored Linen Thread; Black Leatherette Binding throughout; White Flat Woven Lacing; Wide Strap and Buckle Wrist Fastening; Width 10 in., Length 10 in.....$21.00

Weight 15 Lbs. per Dozen

All Above, One in a Box



PROFESSIONAL MODEL

Per Dozen

No. M400—Selected Brown Colored Calf Skin Palm and Fingers; Heavy Black Mitten Leather Back and Band; Black Leather Welt on Edge Band; Tan Leatherette Binding throughout; Heavy Black Flat Woven Lacing; Strap and Buckle Wrist Fastening; Width 10 in., Length 10½ in.....$24.00

Weight 15 Lbs. per Dozen

ZENITH CATCHERS' MITTS

STANDARD MODEL

Large round shape Pattern of uniform thickness throughout; Very flexible and requires no breaking in.

Per Dozen

No. M300B—Heavy Black Genuine Alco Leather Palm and Fingers; Heavy Oak Mitten Leather Back and Band; Full Laced Edge Rim; Black Fabric Lining Laced with Heavy White Flat Woven Lace; Strap and Buckle Wrist Fastening; Width 10 in., Length 10½ in..$18.00

Weight 15 Lbs. per Dozen

STANDARD MODEL

Large round shape Pattern of uniform thickness throughout, Very flexible and requires no breaking in.

Per Dozen

No. M300—Heavy Oak Colored Genuine Alco Leather Palm and Fingers; Heavy Black Mitten Leather Back and Band; Black Fabric Lining; Laced with Heavy Flat Woven Lace; Strap and Buckle Wrist Fastening; Width 10 in., Length 10 in. $18.00

Weight 12 Lbs. per Dozen

REGULATION MODEL

A well formed Mitt with deep Pocket; Very flexible and requires no breaking in.

Per Dozen

No. M250B—Genuine Black Yucatan Leather Palm and Fingers; Heavy Brown Leather Back and Edge Band; Black Fabric Binding; Laced with White Flat Lacing; Strap and Buckle Wrist Fastening; Width 10 in., Length 10 in $15.00

Weight 12 Lbs. per Dozen

AMATEUR MODEL

For Boys and Young Men; the Palm is well Padded and has a deep Pocket.

Per Dozen

No. M200—Green Colored, Genuine Napa Leather Palm, Fingers and Back; Wine Colored Leather Edge Band; Black Fabric Lining; Full Laced Rim; Tan Colored Lace, Strap and Buckle Wrist Fastening; Width 9½ in., Length 9 in.$12.00

Weight 9 Lbs. per Dozen

AMATEUR MODEL

For Boys and Young Men; the Palm is well Padded and has a deep Pocket.

Per Dozen

No. M200B—Black Colored Genuine Napa Leather Palm, Fingers and Back; Wine Colored Leather Edge Band; Black Fabric Binding; Full Laced Edge Rim; White Flat Woven Lace; Strap and Buckle Wrist Fastening; Width 9½ in., Length 9 in.....$12 00

Weight 9 Lbs. per Dozen

AMATEUR MODEL

For Boys and Young Men; the Palm is well Padded and has a deep Pocket.

Per Dozen

No. M150B—Finest Quality Genuine Black Napa Leather; Oak Tan Leather Edge Band, White Stitched; Strap and Buckle Fastening at Wrist; Width 9½ in., Length 9½ in.....$9 00

Weight 9 Lbs. per Dozen

YOUTH'S MODEL

Per Dozen

No M150—Brown Colored Mitten, Palm, Fingers and Back Black Colored Leather Edge Band, Red Fabric Bound, Full Laced Rim Strap and Buckle Wrist Fastening; Width 9 in., Length 9 in.$9.00

Weight 9 Lbs. per Dozen

YOUTH'S MODEL

Per Dozen

No. M100B Black Mitten Leather Palm and Fingers, Wine Colored Leather Edge Band, Black Leatherette Back, Orange Thread Stitched Red Fabric Bound Strap and Buckle Wrist Fastening; Width 9 in., Length 9 in $6 00

Weight 9 Lbs. per Dozen

YOUTH'S MODEL

Per Dozen

No. M100—Heavy Black Mitten Leather Palm and Fingers; Tan Leather Edge Band Heavy Black Leatherette Back Red Fabric Bound, White Stitched Strap and Buckle Wrist Fastening; Width 9 in., Length 9 in.$6 00

Weight 6 Lbs. per Dozen

BOY'S MODEL

Per Dozen

No. M50 Tan Mitten Leather Palm and Fingers, Black Leather Back and Edge Band, Red Fabric Bound, White Stitched, Strap and Buckle Wrist Fastening, Width 8½ in., Length 8½ in. $3.00

Weight 6 Lbs. per Dozen

ZENITH BASEMENS' MITTS

KETCHAL MODEL

Made to give the desired pliability required by the Player; the Back is double Leather with Finger Stalls, insuring safety to the hand; Thumb is laced to Palm, helping to form a Natural Pocket; Padded with Best Quality Asbestos Felt. Per Dozen

No. B1000—Best Quality Tan Colored French Calf Skin; Black Leather Welted Seams; Black Leather Binding. White Rawhide Laced; Width 9½ in., Length 9½ in.....$60.00

Weight 12 Lbs. per Dozen

KETCHAL MODEL

Made to give the desired pliability required by the Player; the Back is double Leather with Finger Stalls, insuring safety to the hand; Thumb is laced to Palm, helping to form a Natural Pocket; Padded with Best Quality Asbestos Felt. Per Dozen

No. B900—Selected Black Calf Skin; Black Leather Welted Seams; Green Leather Binding; White Rawhide Laced; Width 9½ in., Length 10 in.....$54.00

Weight 8 Lbs. per Dozen

REDY BROK MODEL

The Fingers are stitched to the Back of the Mitt, giving the Player good control and free use of his Fingers; the Fingers extend to edge of Mitt and are laced to Edge Rim 1 in. Wrist Strap, Extended Leather Chafe Felt Lined under Buckle; Padded with Best Quality Asbestos Felt. Per Dozen

No. B800—Slate Colored, Velvet Finished Buck Skin Palm and Fingers; Black Mitten Leather Back; Olive Colored Leather Binding, White Rawhide Laced, Width 9½ in., Length 10 in.....$48.00

Weight 7 Lbs. per Dozen

STABER MODEL

The Palm is made of One Piece of Leather, with set-in Thumb, similar to a Fielder's Glove; Has special Finger Construction like a Glove Lining, giving great flexibility and insuring fast and perfect fielding; Thumb is laced to Palm, forming a perfect Pocket; Padded with Best Quality Asbestos Felt.

Per Dozen

No. B700—Best Quality Brown Tan Genuine Calf Skin, Full Leather Lined, Black Leather Welted Seams; Black Leather Binding; White Rawhide Laced; Width 8½ in., Length 9½ in.....$42.00

Weight 6 Lbs. per Dozen

REDY BROK MODEL

The Fingers are stitched to the Back of the Mitt, giving the Player good control and free use of his Fingers; the Fingers extend to edge of Mitt and are laced to Edge Rim; 1 in. Wrist Strap, Extended Leather Chafe, Felt Lined under Buckle.

Per Dozen

No. B600—Selected Quality Black Horsehide Palm and Fingers; Black Mitten Leather Back; Black Leather Binding, White Rawhide Laced, Width 10 in., Length 10 in.....$36.00

Weight 6 Lbs. per Dozen

SEMI-PRO MODEL

A very desirable Model, constructed with Three Section Cover Back; Has Full Laced Edge Rim and Thumb is Laced to Palm, forming a Deep Pocket; Padded with Best Quality Asbestos Felt.

Per Dozen

No. B500—Selected Genuine Pearl Horsehide Palm; Pearl Mitten Leather Back; Black Leather Welted Seams; Black Leather Binding; White Rawhide Laced; Width 9½ in., Length 10 in.....$30.00

Weight 6 Lbs. per Dozen

STANDARD MODEL

Similar to Redy Brok Model; Very popular in Design and Price, Thumb is Laced to Palm, forming a Deep Pocket

Per Dozen

No. B400—Smoked Grain Leather Palm and Fingers, Black Mitten Leather Back, Black Leatherette Binding; White Imitation Porpoise Laced; Strap and Buckle Wrist Fastening; Width 9½ in., Length 10 in $24.00

Weight 6 Lbs. per Dozen

STANDARD MODEL

Similar to Redy Brok Model, Very popular in Design and Price; Thumb is Laced to Palm, forming a Deep Pocket

Per Dozen

No. B300—Black Alco Leather Throughout, Wine Colored Fabric Binding; White Cotton Laced; Strap and Buckle Wrist Fastening; Width 9 in., Length 9½ in. $18.00

Weight 6 Lbs. per Dozen

REGULATION MODEL

A durable, well constructed Mitt for Youths and Boys; the Thumb is Laced to Palm, forming a Deep Pocket

Per Dozen

No. B200—High Grade Brown Napa Leather Throughout, Black Fabric Binding; Heavy Tan Colored Cotton Cord Laced, Strap and Buckle Wrist Fastening, Width 9 in., Length 9 in.....$12.00

Weight 6 Lbs. per Dozen

AMATEUR MODEL

A Low Priced Mitt for Amateurs and Boys

Per Dozen

No. B150—Black Napa Leather Throughout; Black Fabric Binding, Heavy Tan Colored Cotton Cord Laced; Strap and Buckle Wrist Fastening, Width 8½ in., Length 9 in.....$9.00

Weight 6 Lbs. per Dozen

All Above, One in a Box

ZENITH FIELDERS' GLOVES

REDY BROK MODEL

REDY BROK

Designed on Scientific Principles; the Palm is Cut to give it a fullness when closing the hand, thus forming a perfect Pocket and making it impossible to rip, tear or break at the crotch of the Fingers; Each Glove is rigidly Inspected and is absolutely Guaranteed.

REDY BROK MODEL

Per Dozen

No. G1000—Professional League; Best Quality Selected Russet French Calf Skin; Black Leather Welted Seams; Black Leather Binding, Full Leather Lined Invisible Hump, Webbed Thumb Piece, Best Quality Felt Padding... $60.00

Weight 4 Lbs. per Dozen

Per Dozen

No. G800B—American League; Best Quality Selected Black Genuine Calf Skin; Tan Leather Welted Seams; Tan Leather Binding, Full Leather Lined; Invisible Hump; Webbed Thumb Piece, Best Quality Felt Padding $48 00

No. G800—Lajoie Model; Selected Buff Colored, Genuine Buck Skin Leather; Olive Leather Welted Seams, Linen Stitched; Green Leather Binding; Full Leather Lined; Invisible Hump; Webbed Thumb Piece; Lightly Padded with Best Quality Felt 48.00

Weight 4 Lbs. per Dozen

PALMLESS MODEL

The Palmless Model has the Celebrated Wide Little Finger; the Padding in center of Glove is removed and is then stitched to the Leather Lining, making a soft, Pliable, Lightly Padded Glove that needs no breaking in

EXPERT MODEL

Per Dozen

No. G700B—Best Quality Selected Black Genuine Calf Skin; Tan Leather Welted Seams; Tan Leather Binding; Full Leather Palmless Lining, Improved Invisible Hump; Webbed Thumb Piece $42.00

No. G700—Best Quality Tan Colored Genuine Calf Skin; Black Leather Welted Seams; Black Leather Binding, Otherwise same as above 42.00

Weight 4 Lbs. per Dozen

This Model is designed similar to our Redy Brok and has the added Laced Bottom Feature which enables the Player to adjust Padding; the Fingers are also Padded a trifle heavier than the Redy Brok; Made of Selected Drab Buck Skin Leather, Black Leather Welted Seams; Black Leather Binding, Full Leather Lined; Wrist Edge Laced with White Rawhide.

Per Dozen

No. G600 —Left Hand $36.00

No. G600R—Right Hand $6.00

Weight 4 Lbs. per Dozen

REDY BROK MODEL

The Palm is Cut to give it a fullness when closing the hand, thus forming a perfect Pocket and making it impossible to rip, tear or break at the crotch of the Fingers; Each Glove is rigidly Inspected and absolutely Guaranteed.

Per Dozen

No. G550—Selected Quality Genuine Brown Calf Skin; Black Leather Welted Seams; Black Leather Binding, Full Leather Lined; Invisible Hump; Webbed Thumb Piece; Best Quality Felt Padding..... $33.00

Weight 4 Lbs. per Dozen

PALMLESS MODEL

The Celebrated Wide Little Finger Model; the Padding in center of Glove is removed and is then stitched to the Leather Lining, making a Soft, Pliable, Lightly Padded Glove that needs no breaking in

Per Dozen

No. G500B—Selected Genuine Black Calf Skin; Wine Colored Leather Welted Seams; Green Leather Binding; Full Leather Palmless Lining, Improved Invisible Hump; Webbed Thumb Piece $30 00

Weight 6 Lbs. per Dozen

All Above, One in a Box

ZENITH FIELDERS' GLOVES

PALMLESS MODEL

Made similar to other Gloves of this Model and has the added Laced Bottom Feature which enables the Player to adjust Padding. Selected Genuine Smoked Buck Skin Leather Black Leather Welted Seams; Black Leather Binding; Full Leather Palmless Lining Improved Invisible Hump; Webbed Thumb Piece; Wrist Edge Laced with White Rawhide

Per Dozen

No. G500 —Left Hand $30.00
No. G500R—Right Hand 30.00

PROFESSIONAL MODEL

Per Dozen

No. 500L—Selected Black Colored Genuine Horsehide Leather; White Leather Welted Seams; Black Leather Binding; Invisible Hump forms deep Pocket..... $30 00

Weight 6 Lbs. per Dozen

REDY BROK MODEL

The Palm is Cut to give it a fullness when closing the hand, thus forming a perfect Pocket and making it impossible to rip, tear or break at the crotch of the Fingers; Each Glove is rigidly inspected and absolutely Guaranteed. Per Dozen

No. G450T—Best Quality Selected Brown Colored Genuine Horsehide Leather; Red Leather Welted Seams; Red Leather Binding; Full Leather Lined; Invisible Hump; Webbed Thumb Piece; Best Quality Felt Padding..... $27 00

LEAGUE MODEL

A large, roomy Model, very wide at the Wrist; Slightly heavier Padded at Heel than other Models Per Dozen

No. G450—Selected Genuine Pearl Colored Calf Skin; Tan Colored Leather Welted Seams; Tan Colored Leather Binding; Full Leather Lined; Invisible Hump; Web Thumb Piece; Best Quality Felt Padding.....$27 00

Weight 4 Lbs. per Dozen

PROFESSIONAL MODEL Per Dozen

No. G400L—Selected, Pearl Colored, Genuine Horsehide Leather; Red Leather Welted Seams; Red Leather Binding; Full Leather Lined; Wrist Edge Laced with White Rawhide Leather; Web Thumb Piece; Best Quality Padding, can be Adjusted to suit.....$24 00

No. G400B—Selected Black Colored Genuine Horsehide Leather; White Leather Welted Seams; White Leather Binding, without Laced Edge, Otherwise same as above..... 24.00

No. G400T—Selected Brown Colored Genuine Horsehide; White Leather Welted Seams; White Leather Binding, without Laced Edge, Otherwise same as above..... 24.00

No. G400TR—Right Hand, Otherwise same as above 24 00

Weight 4 Lbs. per Dozen

PALMLESS MODEL

This Model has the Wide Little Finger Feature; the Felt Padding in center of Glove is removed and Padding is then stitched to Leather Lining, making a very Soft, Pliable, Lightly Padded Glove that requires no breaking in

Per Dozen

No. G400E Selected, Ecru Colored Genuine Horsehide Leather; Red Leather Welted Seams; Red Leather Binding, Full Leather Palmless Lining; Web Thumb Piece; Best Quality Padding .. $24.00

Weight 4 Lbs. per Dozen

REDY BROK MODEL

The Palm is Cut to give it a fullness when closing the Hand, thus forming a perfect Pocket and making it impossible to rip, tear or break at the crotch of the Fingers. Per Dozen

No. 350—Selected Fleshor Suede Finished Kid Leather, Oxford Gray Color; Red Leather Welted Seams; Red Leather Binding; Full Leather Lined; Invisible Hump, Webbed Thumb Piece; Wrist Edge Laced with Flat White Imitation Porpoise Lace; Lightly Padded with Best Quality Felt.....$21.00

No. G350D—Genuine Alco Kid Leather, Drab Suede Finish; Green Leather Welted Seams, Green Leather Binding, Otherwise same as above 21.00

Weight 3 Lbs per Dozen

No. G300L

PROFESSIONAL MODEL

This Model has Wide Little Finger and Deep Pocket; In the No. G300L, the Padding can be adjusted to suit Player. Per Dozen

No. G300L—Smoked Grain Indian Buck Leather; Green Leather Welted Seams; Green Leather Binding; Full Leather Lined; Wrist Edge Laced with White Lacing; Web Thumb Piece; Best Quality Padding... .$18.00

No. G300T—Redy Brok Model; Genuine Alco Brown Colored Kid Leather, without Laced Edge 18 00

No. G300B—Palmless Model; Genuine Alco Black Leather; Red Leather Welted Seams, without Laced Edge 18.00

Weight 3 Lbs. per Dozen

PROFESSIONAL MODEL

This Model has Wide Little Finger and Deep Pocket

Per Dozen

No. G250B—Black Yucatan Kid Leather; Green Leather Welted Seams; Green Leather Binding; Full Leather Lined; Web Thumb Piece; Best Quality Padding $15 00

No. G250 Pearl Colored Yucatan Leather, Black Leather Welted Seams; Black Leather Binding, Otherwise same as above. 15.00

Weight 3 Lbs. per Dozen

No. G250B

All Above, One in a Box

ZENITH FIELDERS' GLOVES

PROFESSIONAL MODEL

Has Wide Little Finger and Deep Pocket; Invisible Hump, Best Quality Felt Padding

Per Dozen

No. G200T—Brown Yucatan Kid Leather; White Leather Welted Seams; White Fabric Binding; Leather Lined Palm $12.00

SEMI-PRO MODEL

Full Size, Medium Priced; for Amateur Ball Clubs; Webbed Thumb Piece

Per Dozen

No. G200—Black Yucatan Kid Leather; Tan Leather Welted Seams, Tan Leatherette Binding; Leather Lined Palm $12.00

No. G200R—Right Hand, Otherwise same as above 12.00

No. G200S—Slate Colored Yucatan Leather; Red Leather Welted Seams; Wine Colored Leatherette Binding; Full Leather Lined 12.00

No. G200G—Olive Green Yucatan Leather; Red Leather Welted Seams; Wine Colored Leatherette Binding; Leather Lined Palm 12.00

LEAGUE MODEL

Extra Wide at Wrist; Large and Roomy and Slightly Heavier Padded at Heel than other Models; Invisible Hump; Webbed Thumb Piece; Best Quality Felt Lining.

Per Dozen

No. G200B—Black Yucatan Kid Leather; White Leather Welted Seams; Leather Lined Palm $12.00

No. G200X—Smoked Indian Grain Buck Leather; Black Leatherette Binding; Leather Lined Palm..... 12.00

Weight 3 Lbs per Dozen

BOYS' SMALL SIZE

Per Dozen

No. G50B—Black Kid Leather; Black Fabric Binding; Leather Lined Palm; Felt Padded Palm and Fingers.....$3 00

No. G50P Pearl Kid Leather; Black Fabric Binding, Felt Padded Palm and Fingers 3.00

No. G50—Brown Kid Leather, Wine Colored Fabric; Colored Binding; Felt Padded Palm and Fingers..... 3.00

Weight 1½ Lbs. per Dozen

STANDARD MODEL

A very Popular, Low Priced Model; Webbed Thumb Piece; Invisible Hump

Per Dozen

No. G150T—Brown Colored Napa Leather; Red Leather Welted Seams, Red Fabric Binding; Leather Lined Palm.....$9.00

No. G150P—Pearl Colored Napa Kid Leather; Red Leather Welted Seams; Red Fabric Binding; Leather Lined Palm 9.00

No. G150B—Black Colored Napa Leather; White Leather Welted Seams; Black Fabric Binding; Leather Lined Palm 9.00

Weight 3 Lbs. per Dozen

AMATEUR MODEL

Palm, Thumb and Fingers cut in One Piece; Has Deep Pocket and Invisible Hump.

Per Dozen

No. G100—Black Kid Leather; White Welted Seams; Black Fabric Binding; Felt Padded Palm.....$6.00

No. 100P—Pearl Colored Kid Leather; Black Leather Welted Seams; Black Fabric Binding; Felt Padded Palm 6 00

No. G100T Brown Kid Leather, White Stitched; Wine Colored Fabric Binding; Felt Padded Palm..... 6.00

No. G100B—Black Kid Leather; White Welted Seams; Black Fabric Binding; Leather Lined Palm.. ..... 6.00

No. G100BR Right Hand, Otherwise same as above 6 00

Weight 3 Lbs. per Dozen

DUK FUT MODEL

This Model is used and recommended by such eminent Ball Players as Tris Speaker, Evers, Sheckard, Mike Donlin, Fred Clark, Ed Walsh, Becker and many others; the Face or Palm and Fingers of the Duk Fut Glove is cut in one piece of leather, which forms webs between Fingers, rendering it impossible for the Glove to tear or rip, and prevents split Fingers or injury to the hand. Requires no breaking in and is ready for use at the time of purchase. Every Glove Guaranteed perfect.

Per Dozen

No. DF500—Made of Highest Quality Black Horsehide Leather, Tan Leather Welted Seams; Tan Leather Binding; Full Leather Lined, Correctly Padded Palm with Invisible Hump.....$30 00

Weight 3 Lbs. per Dozen

Per Dozen

No. DF300—Made of Selected Tan Kid Leather; Black Leatherette Binding; Full Leather Lined; Corrected Padded with Inside Hump.....$18.00

Weight 3 Lbs. per Dozen

Per Dozen

No. DF200—Made of Selected Slate Colored Kid Leather; Red Fabric Binding, Full Felt Lined, with Leather Lined Palm $12 00

Weight 3 Lbs. per Dozen

Per Dozen

No. DF150—Made of Olive Green Genuine Napa Leather; Black Fabric Binding; Full Felt Lined, with Leather Lined Palm $9 00

Weight 3 Lbs. per Dozen

All Above, One in a Box

ZENITH CATCHERS' MASKS

PROFESSIONAL MODEL

Zenith Masks are made of the Finest Quality Cold Drawn Steel and are Electrically Welded making them Extra Strong and Absolutely Safe. They are finished in Dull Black Enamel to prevent sun reflection; the Frame is so constructed as to permit the center wire to be left out without weakening the Mask, thus giving the Player a clear view of the entire Field. the Mask fits close to the Face and is fitted with Zenith All-over Cushion Face Pads which are Laced to the Frame and are very Comfortable to the Face and Chin. Adjustable Overhead Elastic Straps.

Per Dozen

No. 1000M—With Neck Protecting Attachment: Oak Tan Kid Leather Face, Chin and Neck Pads, Leather Sun Shade $60 00
Weight 24 Lbs. per Dozen

Per Dozen

No. 800M—Without Neck Protecting Attachment or Sun Shade. Oak Tan Kid Leather Face and Chin Pads . $48 00
Weight 21 Lbs. per Dozen

Open Vision

SEMI-PROFESSIONAL MODEL

Per Dozen

No. 700M—Made in the same substantial manner as our Professional Model, with Cushioned Neck Protecting Attachment Full Length Face and Fore Head Pads, made of Black Kid Leather and Laced to Frame, Moulded and Padded Chin Rest; Adjustable Overhead Elastic Straps ... $42 00
Weight 21 Lbs. per Dozen

SEMI-PROFESSIONAL MODEL

Per Dozen

No. 600M This Mask has the same Frame as our No 700M shown at left, with **Leather Sun Shade;** Fitted with Olive Green Kid Leather Full Length Face and Forehead Pads Laced to Frame, Moulded and Padded Chin Rest, Adjustable Overhead Elastic Straps ... $36 00

Weight 21 Lbs. per Dozen

REGULATION MODEL

Per Dozen

No. 500M—Heavy Steel Wire Frame Electrically Welded, Dull Black Enameled, Has Open Vision Frame which gives the Player a clear view of entire Field, Fitted with Tan Brown Kid Leather Full Length Face and Forehead Pads, Laced to Frame; Moulded Chin Rest, Adjustable Head Straps. $30 00
Weight 15 Lbs per Dozen

LEAGUE MODEL

Per Dozen

No. 400M Heavy Steel Wire Frame, Electrically Welded, Oxidized Finish; Fitted with Tan Brown Leather Full Length Face and Forehead Pads, Laced to Frame; Heavy Leather Chin Rest, Adjustable Forehead Rest, Leather Sun Shade, Adjustable Elastic Head Strap.. $24 00

Weight 15 Lbs. per Dozen

AMATEUR LEAGUE MODEL

Per Dozen

No. 300M—This is a Full Size Mask made of Heavy Wire, Electrically Welded Black Enameled Finish, Well Stuffed Leather Cheek Pads, Laced to Frame, Heavy Leather Chin Rest, **Adjustable Forehead Rest;** Adjustable Elastic Head Strap. $18.00
Weight 12 Lbs. per Dozen

AMATEUR LEAGUE MODEL

Per Dozen

No. 200M—This is a Full Size Mask, made of Heavy Wire, Electrically Welded, Black Enameled Finish Four Short Well Stuffed Leather Cheek Pads, Wired to Frame, Leather Chin Rest, Leather Head Rest, Elastic Head Strap $12 00
Weight 12 Lbs. per Dozen

Per Dozen

No. 250YM A Good Sized **Mask, made of Heavy Steel** Wire, Electrically Welded, **Black Enameled Finish;** Four Short Well Stuffed Leather Cheek Pads, Laced to Frame, Heavy Leather Chin Rest; Adjustable Elastic Head Strap $15.00
Weight 9 Lbs. per Dozen

Per Dozen

No. 200YM Full Size, Good **Quality Steel Wire,** Black Enameled Finish Four Short Well Stuffed Leather Cheek Pads, Wired to Frame Adjustable Forehead Piece; Adjustable Elastic Head Strap $12.00

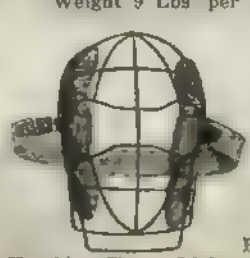
Weight 9 Lbs per Dozen

Per Dozen

No. 150YM Full Size, Heavy Steel Wire, Black Enameled Finish, Well Padded, Adjustable Head Strap.....$9.00
Weight 9 Lbs. per Dozen

Per Dozen

No. 100YM—Youth's Size, Heavy Steel Wire, Black Enameled Finish; Well Padded; Adjustable Head Strap....$6 00
Weight 6 Lbs. per Dozen

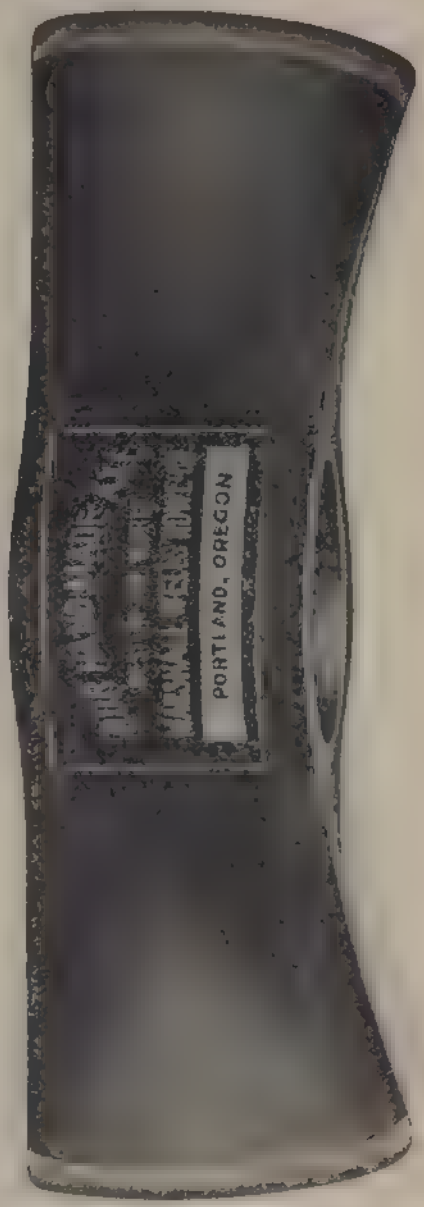


Per Dozen

No. 50M Youth's Size; Light Wire, Black Enameled Finish; Well Padded; Adjustable Head Strap.....$3.00
Weight 6 Lbs. per Dozen

PACIFIC COAST DOUBLE BITTED AXES

FALLING PUGET SOUND PATTERN



Axes Guaranteed to be Free from Flaws and Soft Temper; Factory to be judge of alleged defects.

This is the Perfect Pattern for Pacific Coast Timber, and is used by Fallers. Correctly Shaped and Ground for Falling Heavy Timber, insuring easy, rapid work

The Eye is prefect so the Axe will hang just right; Highest Grade Crucible Steel, properly Tempered and Ground; Unhandled.

No. 560—ZENITH Full Polished; Fire Blue Finish				No. 570—OUR HAND MADE Natural Black Finish			
Weights	3 to 3 1/2	4 to 4 1/2	4 3/4 to 5	Weights	3 to 3 1/2	4 to 4 1/2	4 3/4 to 5
Per Dozen	$20 00	20 50	21 00	Per Dozen	$20 00	20 50	21 00

One Dozen in a Box; Average Shipping Weight 50 Lbs. per Dozen

HANDLED AXES

We Handle Axes in our own Shop, using the Zenith Wedge Lock and any of the following Grades of Handles from our own Stock. This work is correctly and neatly done and is superior to Factory Handling

No. 560 and No. 570 Axes Shop Handled as Follows:

Zenith	Our Hand Made		
No. 561	No. 571—With Zenith Oval Hand Shaved Hickory Handles	Add per Dozen	$9 00
No. 562	No. 572—With Zenith Octagon Hand Shaved Hickory Handles	Add per Dozen	9 00
No. 563	No. 573—With Hartford Oval Hand Shaved Hickory Handles	Add per Dozen	8.00
No. 564	No. 574—With Hartford Octagon Hand Shaved Hickory Handles	Add per Dozen	8.00
No. 565	No. 575—With Northern King Octagon Hickory Handles	Add per Dozen	7.50
No. 566	No. 576—With Oregon Oak Octagon Hand Shaved Handles	Add per Dozen	8.00

PACIFIC COAST DOUBLE BITTED AXES

SWAMPING PATTERN

Axes Guaranteed to be Free from Flaws and Soft Temper; Factory to be judge of alleged defects.

This Axe is used by Loggers and Lumbermen for Swamping, Snaping and Road Clearing, and is the Correct Pattern for this work; Made of Highest Grade Crucible Steel, Perfectly Tempered, and Ground; Will stand Severest Service; Unhandled.

No. 530—ZENITH
Full Polished; Fire Blue Finish

Weights	3 to 3½	4 to 4½	4¾ to 5
Per Dozen	$20 00	20 50	21 00

No. 540—OUR HAND MADE
Natural Black Finish

Weights	3 to 3¾	4 to 4½	4¾ to 5
Per Dozen	$20 00	20 50	21 00

One Dozen in a Box; Average Shipping Weight 50 Lbs. per Dozen

HANDLED AXES

We Handle Axes in our own Shop, using the Zenith Wedge Lock and any of the following Grades of Handles from our own Stock. This work is correctly and neatly done and is superior to Factory Handling

No. 530 and No. 540 Axes Shop Handled as Follows:

Zenith	Our Hand Made			
No. 531	No. 541	With Zenith Oval Hand Shaved Hickory Handles	Add per Dozen	$2 00
No. 532	No. 542	With Zenith Octagon Hand Shaved Hickory Handles	Add per Dozen	2 00
No. 533	No. 543	With Hartford Oval Hand Shaved Hickory Handles	Add per Dozen	8 00
No. 534	No. 544	With Hartford Octagon Hand Shaved Hickory Handles	Add per Dozen	8 00
No. 535	No. 545	With Northern King Octagon Hickory Handles	Add per Dozen	7 50
No. 536	No. 546	With Oregon Oak Octagon Hand Shaved Handles	Add per Dozen	8 00

PACIFIC COAST DOUBLE BITTED AXES

CALIFORNIA REVERSIBLE PATTERN

No. 590—ZENITH

Full Polished; Fire Blue Finish

Axes Guaranteed to be Free from Flaws and Soft Temper; Factory to be Judge of alleged defects.

No. 600—OUR HAND MADE

Natural Black Finish

Reversible, Wide Flaring Bits, used for General Chopping and Clearing. A favorite with Wood Cutters, also used in peeling bark. Made of the Highest Grade Crucible Steel, carefully Tempered, Ground and Sharpened. This Axe has a Perfect Eye and will hang just right for the most exacting work; Specially Designed for Severe Service.

Weights	3 to 3¾	4 to 4½	4¾ to 5	Weights	3 to 3¾	4 to 4½	4¾ to 5
Per Dozen	$20.00	20.50	21.00	Per Dozen	$20 00	20 50	21 00

HANDLED AXES

We Handle Axes in our own Shop, using the Zenith Wedge Lock and any of the following Grades of Handles from our own Stock. This work is correctly and neatly done and is superior to Factory Handling

No. 590 and No. 600 Axes Shop Handled as Follows:

Zenith	Our Hand Made		
No. 591	No. 601—With Zenith Oval Hand Shaved Hickory Handles	Add per Dozen	$9 00
No. 592	No. 602—With Zenith Octagon Hand Shaved Hickory Handles	Add per Dozen	9.00
No. 593	No. 603—With Hartford Oval Hand Shaved Hickory Handles	Add per Dozen	8.00
No. 594	No. 604—With Hartford Octagon Hand Shaved Hickory Handles	Add per Dozen	8.00
No. 595	No. 605—With Northern King Octagon Hickory Handles	Add per Dozen	7.50
No. 596	No. 606—With Oregon Oak Octagon Hand Shaved Handles	Add per Dozen	8.00

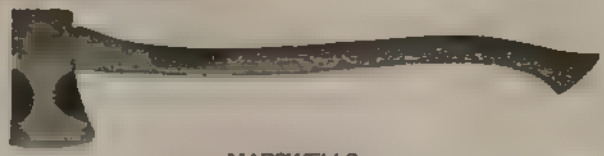
BOYS' HANDLED AXES

ZENITH

Per Dozen

No. Z2P—2¼ Lbs., 4 in. Cut; Extra Tool Steel, Full Polished and Etched; 28 in. Second Growth Hickory Handle, Zenith Wedge Lock $14.00

Weight 45 Lbs. per Dozen



MARSWELLS

Refined Steel; Polished and Etched, Blued Phantom Bevel, Polished Bit, Selected Hickory Handle; Zenith Wedge Lock.

Per Dozen

No. M2PB—2¼ Lbs., 4 in. Cut; 28 in. Handles..... $12 00
No. M3PB—2¾ Lbs., 4¼ in. Cut; 30 in. Handle 14 60

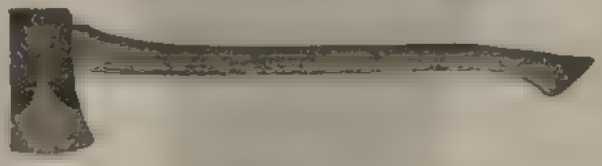
Weight 50 to 55 Lbs. per Dozen

HARTFORD

Per Dozen

No. H2G—2¼ Lbs., 4 in. Cut, Extra Steel, Gold Bronzed with Polished Bit and Head; 28 in. Selected Hickory Handle; Zenith Wedge Lock $11.00

Weight 45 Lbs. per Dozen



NORTHERN KING

Per Dozen

No. N2PB—2¼ Lbs., 4 in. Cut; Refined Tool Steel; Green and Gold Label on Red Body; Fire Bronzed Green Phantom Bevel; Polished Bit, 28 in. Selected Hickory Handle $10.00

Weight 45 Lbs. per Dozen

One Dozen in a Crate

HUNTERS' OR CRUISERS' AXES

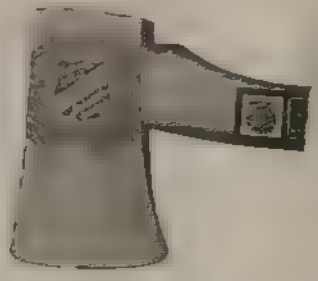
ZENITH, BOY SCOUT

5 in. High, 2⅜ in. Cut Extra Quality Tool Steel, Full Polished and Etched Perfectly Tempered Razor Edge 13 in. Selected Shaped Hickory Handle; Sharpened.

Per Dozen

No. ZOP—Weight without Handle 1 Lb. Each..... $12 00

Weight 20 Lbs. per Dozen



HARTFORD

5½ in. High, 3⅛ in. Cut Extra Quality Tool Steel, Half Polished; Gold Bronze Body; Perfectly Tempered Razor Edge, 16 in. Selected Shaped Hickory Handle Sharpened.

Per Dozen

No. H1G—Weight without Handle 1¾ Lbs. Each..... $10.00

Weight 25 Lbs. per Dozen
One Dozen in a Box

HAND MADE

5 in. High, 3⅜ in. Cut Extra Quality Tool Steel, Gun Metal Finish; Perfectly Tempered Razor Blade 16 in. Selected Shaped Hickory Handle, Sharpened

Per Dozen

No. X0B—Weight without Handle 1 Lb. Each..... $12 00

Weight 20 Lbs. per Dozen

Cut shows Style of Handle furnished in above Hunters'or Cruisers' Axes

AXE RACKS

SENSIBLE

Each

No. 318H—Holds 14 Handled Axes above and 18 Unhandled below; Occupies Space 14x28 in.; Two Racks, back to back, in circular form, will hold 64 Axes; made of Hardwood, Edges and Top finished in Red and Varnished..... $5.50

One in a Crate; Weight 15 Lbs. Each

BOY'S HANDLED AXES

ZENITH

Per Dozen

No. Z2P 2¼ Lbs., 4 in Cut, Extra Tool Steel, Full Polished and Etched; 28 in. Second Growth Hickory Handle; Zenith Wedge Lock $14.00

Weight 45 Lbs. per Dozen

MARSWELLS

Refined Steel; Polished and Etched; Blued Phantom Bevel, Polished Bit, Selected Hickory Handle, Zenith Wedge Lock

Per Dozen

No. M2PB 2¼ Lbs., 4 in Cut 28 in Handle ... $12 00
No. M3PB 2¾ Lbs., 4½ in. Cut; 30 in. Handle..... 14.60

Weight 50 to 55 Lbs. per Dozen

HARTFORD

Per Dozen

No. H2G 2¼ Lbs., 4 in. Cut; Extra Steel; Gold Bronzed with Polished Bit and Head, 28 in Selected Hickory Handle Zenith Wedge Lock..... $11.00

Weight 45 Lbs. per Dozen

NORTHERN KING

Per Dozen

No. N2PB 2⅛ Lbs., 4 in. Cut; Refined Tool Steel; Green and Gold Label or Red Body Fire Bronzed Green Phantom Bevel; Polished Bit, 28 in. Selected Hickory Handle....$10.00

Weight 45 Lbs per Dozen

One Dozen in a Crate

ZENITH; MAHOGANY HANDLE

Extra Thin Bit

Nickel Plated and Polished; Zenith Trade Mark, Etched; 2⅛ Lbs., 4 in Cut; 18 in Handle, Complete with Leather Sheath

Per Dozen

No. ZN -With Nail Slot... ....$21 00

Weight 36 Lbs. per Dozen

ZENITH; PLAIN HANDLE

Per Dozen

No. ZB—Dead Black Finish, without Sheath... .. .$9 00

Weight 36 Lbs. per Dozen

Per Dozen

No. 13—Extra Sheaths, for above .. $4 20

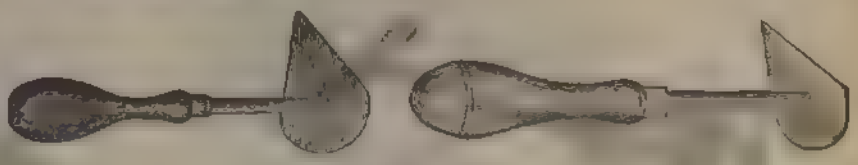
PLUMBERS' TOOLS

STEEL BENDING PINS

Per Dozen

No. A2097—Bent at Both Ends, 14 in. Long; for Bending Lead Pipe.....$6.00

Weight 9 Lbs. per Dozen



SHAVE HOOKS

To Scrape and Brighten Lead Pipe, so Wiping Solder will adhere

Per Dozen

No. B2097—Oval $6.00

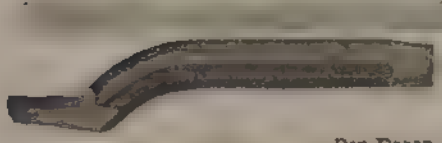
Weight ¾ Lb. per Dozen

Per Dozen

No. C2097—Half Oval, with One Flat Side $6.00

Weight ¾ Lb. per Dozen

LEAD CALKING TOOLS AND CHISELS, Etc.



Per Dozen

No. D2097—Regular or Stub Calking Irons; Square Edge for Calking Soil Pipe, Water Mains, etc.....$8.40

Weight 9 Lbs. per Dozen

Per Dozen

No. E2097—Out-bevel Calking Irons; Edge Beveled for Calking close to one edge of Hub $8.40

Weight 9 Lbs. per Dozen

Per Dozen

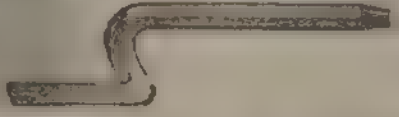
No. F2097—In-bevel Calking Irons Edge Beveled for Calking close to one edge of Hub.....$8.40

Weight 9 Lbs. per Dozen

Per Dozen

No. H2097—Right Hand Offset Calking Irons $12.00

Weight 9 Lbs per Dozen



Per Dozen

No. K2097—Left Hand Offset Calking Irons $12.00

Weight 9 Lbs. per Dozen

Per Dozen

No. L2097—Ceiling Calking Irons; adapted to work in corners or near ceiling $18.00

Weight 9 Lbs per Dozen

Per Dozen

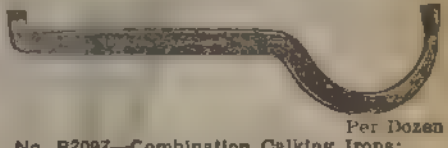
No. M2097—Straight Yarning Irons; for Calking Oakum into Joints.....$12.00

Weight 15 Lbs. per Dozen

Per Dozen

No. N2097—Spring Yarning Irons to work Oakum into Joints by Hand.$12.00

Weight 9 Lbs. per Dozen



Per Dozen

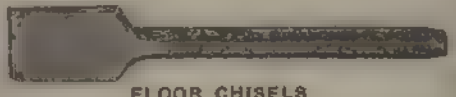
No. P2097—Combination Calking Irons; for Calking Oakum or Lead in Inaccessible Places $24.00

Weight 9 Lbs. per Dozen

No. R2097—ALL STEEL CHISELS, FOR WOOD

To use with Hammer instead of Mallet

Width Cut, In.	1	1½
Per Dozen	$7.20	9.00



FLOOR CHISELS

Per Dozen

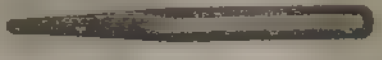
No. S2097—8 inch All Steel; for making Openings in Woodwork to get at the Plumbing $24.00

No. T2097—PLUMBERS COLD CHISELS

Size, Inches	½	⅝	¾
Per Dozen	$4.20	5.40	7.80

PLUMBERS' AND TINNERS' SNIPS

For Prices and Sizes, see page 867

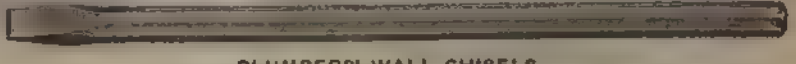


ROUND NOSE CHISELS
DIAMOND POINT CHISELS
CAPE CHISELS

For Prices and Sizes see page 655

PLUMBERS' GAS PLIERS

For Prices and Sizes see page 621



PLUMBERS' WALL CHISELS

Each

For drilling through brick or concrete walls

No. W2097—¾x30 inches $4.50

Weight 5 Lbs. Each

STAR DRILLS, ¼ to ⅝ in. Diam. by 8 and 12 in. Long are shown on page 652

PLUMBERS TOOLS

BASIN WRENCHES

Per Dozen

No. A2098—All Steel, Buzzels Patent Basin Wrench, to Tighten Inaccessible Nuts on bottom of Basin Cocks.....$17.50
Weight 14 Lbs. per Dozen

PIPE WRENCHES

Trimo and Stillson

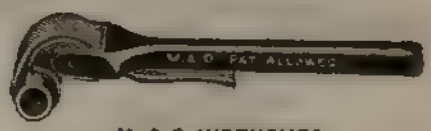
For Prices and Sizes see Mining Department

TAP BORERS

For use in tapping lead pipe in making connections

Per Dozen

No. E2098—New York Pattern $8.40
Weight 1½ Lbs. per Dozen



M. & O. WRENCHES

For Nickel Plated or Brass Pipe

Per Dozen

No. B2098—12 in. Long, Suitable for use on pipe from ⅛ to 2 in. Diam. $27.00
Weight 20 Lbs. per Dozen

No. C2098—PIPE BENDING SPRINGS

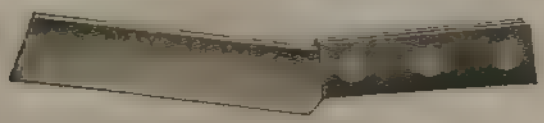
Used in making bends or turns in Lead Pipe

Pipe Size, In.	1	1¼	1½	2
Wt. per Doz., Lbs.	32½	30	36	54
Per Dozen	$8.25	8.50	8.75	9.00

ASBESTOS JOINT RUNNERS

No. D2098—Improved Square Section, ¾ and 1 in.; for Calking Melted Lead Joints in Cast Iron Pipe

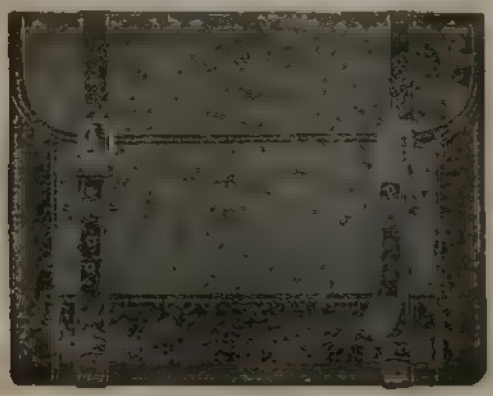
Size Nos.	1	2	3
For Pipe, In.	2, 3, 4	4, 5, 6	6, 8, 10
Weight Each, Lbs.	1⅛	1⅛	2⅛
Each	$1.50	1.85	2.50



CHIPPING KNIVES

Per Dozen

No. H2098—5 in. Blade; for Chipping Rough Edges of Lead, Iron or Tile Piping $6.75
Weight 10 Lbs. per Dozen



PLUMBERS TOOL BAG

Heavy Brussels Carpet Sides and Flap; Heavy Leather Ends and Bo[illegible]

Each

No. K2098—(7) Size 16½x27½ inches.....$5.50
Weight 3 Lbs. Each

LEAD PIPE CUTTER

Will cut lead pipe with ease, leaving the edges smooth

No. L2098—5 Wheel Cutter, Length 8 inches Over-all.....$3.00
Weight ¾ Lb. Each

PLUMBERS TOOLS

UNIVERSAL BIBB SEAT DRESSERS

With Four Interchangeable Tool Steel Cutters for ½, ⅝, ¾, 1 in. Bibbs

Per Dozen

No. A2099—Complete $27.00

Weight 18 Lbs. per Dozen

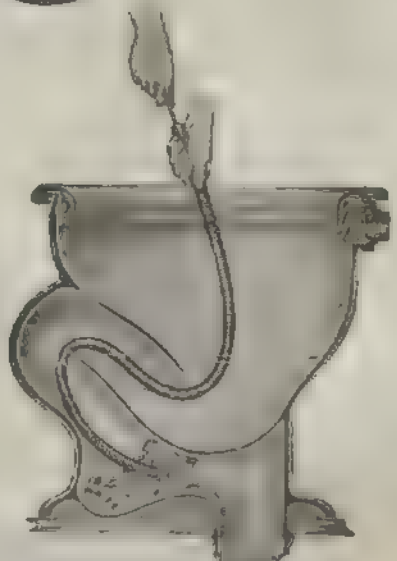
GREASE BOXES

For Gease, Rosin and Flour

Per Dozen

No. B2099—Medium Size, 2x6¼ inches, Spun Brass.....$17.50

Weight 10 Lbs. per Dozen



THE GRAPPELO CLEANER

For Cleaning Closet Bowls; will positively remove anything inside the Bowl. Every Plumber should have one. Each

No. R2099—54 in. Long; made of Flexible Steel Wire with a Steel Grapple so arranged that it will catch and hold solid matter, allowing it to be easily removed $5.00

One in a Box; Weight 2 Lbs. Each

NYE WIPING CLOTHS

Dry; Absolutely no expense spared to make these the Best Wiping Cloths made.

No. T2099—ENGLISH HERRING BONE TICKING

Per Dozen

Size 3x3 in. $1.90

Size 3½x3½ in. 2.10

No. V2099—ENGLISH MOLE SKIN

Per Dozen

Size 3x3 in.....$2.75

Size 3½x3½ in..... 3.00

One in a Carton

Wt. About 1 Lb. per Dozen

No. L2099—DRIFT PLUGS

Hardwood; To Drive through Lead Pipe to remove Dents or Kinks.

Size, In.	½	¾	1
Wt. Doz.	¼	⅛	¾
Per Doz.	$1.20	1.60	1.80
Size, In.	1¼	1½	2
Wt. Doz.	1	1¼	2
Per Doz.	$2.10	2 45	2.85

No. H2099—TURN PINS

Hardwood; For Expanding Ends of Lead Pipe and Traps

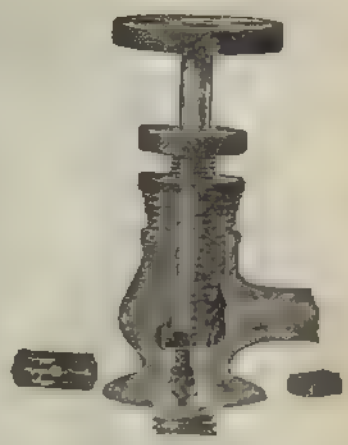
Size Nos.	1	2	3
Size, In.	2¼	2½	2¾
Weight Dozen, Lbs.	1¼	2	2½
Per Dozen	$3.00	3.60	4 20

SIDE EDGERS

Per Dozen

No. N2099—Boxwood; for working out Edges of Sheet Lead Tank Linings, etc.; Size 3x7½ in.....$6.75

Weight 6 Lbs. per Dozen



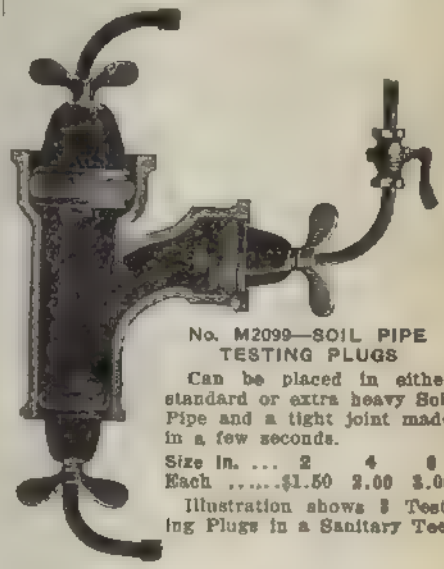
BIBB RESEATERS

Each

Will save the cost on first job; Simply slip off the Bonnet of the leaky faucet, insert the tool, turn Feed Screw until Cutter rests on Seat, then turn; "Fed by a thread".....$3 50

In a Neat Canvas Bag

Weight 1¼ Lbs. Each



No. M2099—SOIL PIPE TESTING PLUGS

Can be placed in either standard or extra heavy Soil Pipe and a tight joint made in a few seconds.

Size In.	2	4	6
Each	$1.50	2.00	3.00

Illustration shows 3 Testing Plugs in a Sanitary Tee.

DRESSERS

Per Dozen

No. E2099—Boxwood; For Straightening Bent Lead Pipe and Sheet Lead. Size 2x12 in.....$12.50

Weight 12 Lbs. per Dozen

BOSSING STICKS

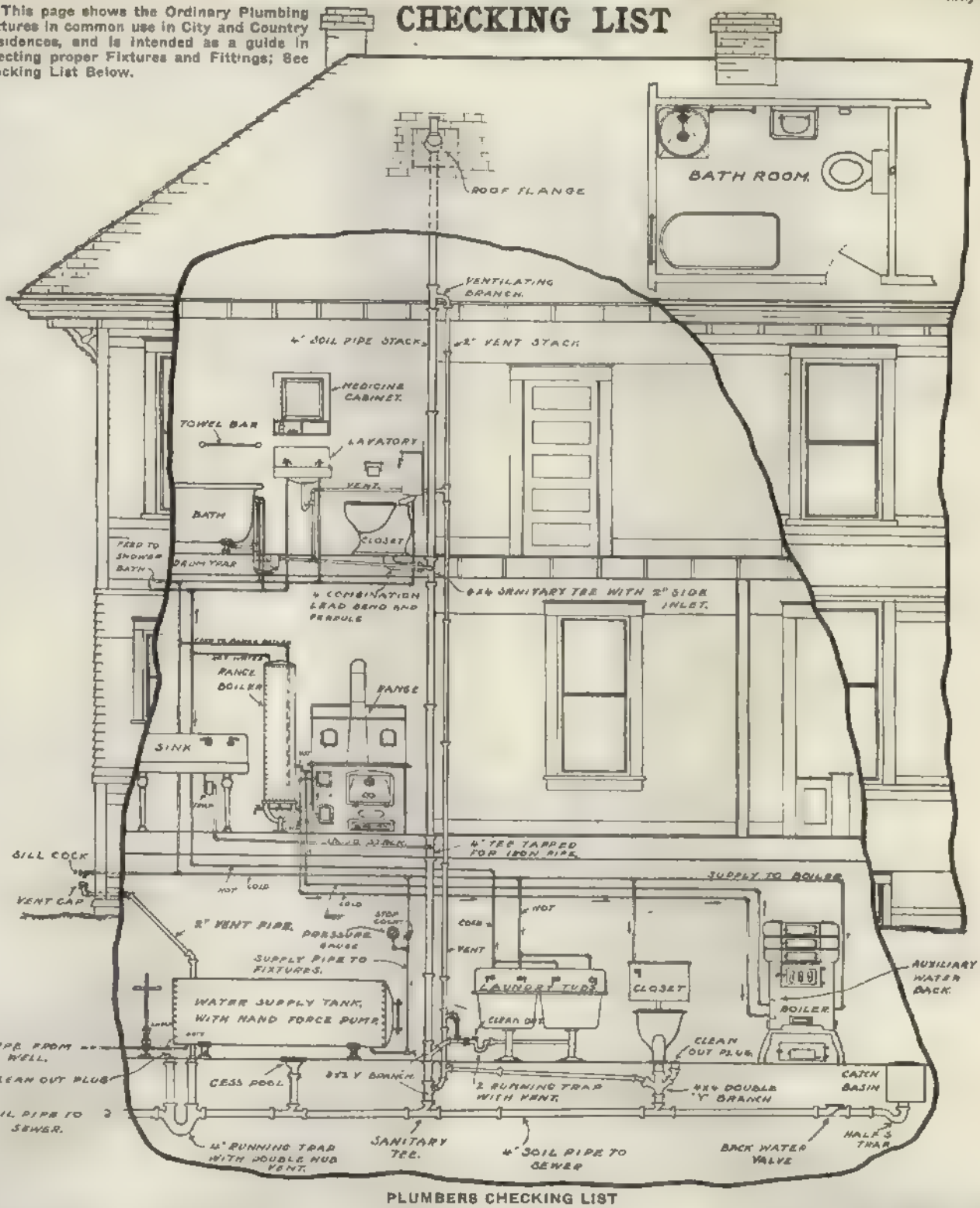
Per Dozen

No. K2099—Boxwood; For Beating out Lead Pipe and Sheet Lead, in Bending or Straightening; Size 3x12 in. $10.15

Weight 13 Lbs. per Dozen

This page shows the Ordinary Plumbing Fixtures in common use in City and Country Residences, and is intended as a guide in selecting proper Fixtures and Fittings; See checking List Below.

CHECKING LIST



PLUMBERS CHECKING LIST

Corporation Cocks
Goose Necks
Curb Cocks & Boxes
Stop Cocks
Lead Pipe
Solder
Galv. Pipe & Fit'gs
Pipe Hangers & Straps
Brass Pipe & Fit'gs
Sewer Pipe & Fit'gs
Cement

Soil Pipe & Fittings
Calking Lead
Oakum
Clean-out Plugs
Ferrules
Lead Bends
Traps
Roof Flanges
Soldering Nipples
Soldering Unions
Comb. Lead & Brass Soldering Nipples

Sill Cocks
Floor Drains
Catch Basin Covers
Water Supply Systems
Storage Tanks
Pumps
Laundry Tubs & Bibbs
Sinks & Backs
Sink Bibbs
Sink Brackets

Range Boilers
Range Boiler Stands
Boiler Fittings
Boiler Stop Cocks
Sediment Cock
Water Heaters
Bath Tubs & Fixtures
Bath Gaskets
Shower Baths
Bath Sprays
Towel Bars

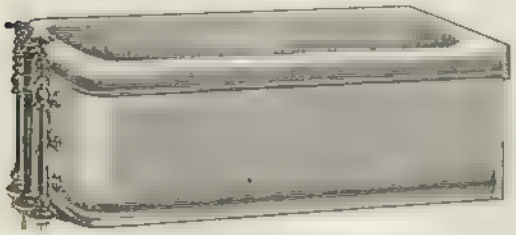
Soap Holders
Bath Tub Seats
Lavatories & Fixtures
Basin Cocks
Basin Supplies
Basin Gaskets
Basin Chains
Glass Shelves
Tumbler Holders
Mirrors
Medicine Cabinets

Urinals
Automatic Urinal Tanks
Urinal Cocks
Urinal Waste Connections
Water Closets
Closet Flanges
Toilet Paper Holders
Marble— Slate— For Shower Stalls, Floor Slabs, etc.
Tools

SOLID PORCELAIN BATH TUBS

Made of Hard Fired Sanitary Vitreous Porcelain Ware with Pure White Highly Glazed Surface

Solid Porcelain Recess Bath Tubs for any space can be furnished from factory and are carried in stock in 5½ ft. lengths, with Concealed Fixtures, same price as No. 14A below



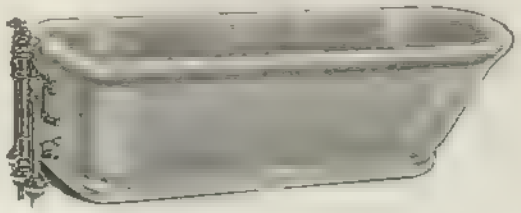
Shows Right Hand Bath

MONARCH BATH

Glazed Inside and over Roll Rim and around Base; Finished Plain White Outside; Fitted with Nickel Plated Combination Bell Supply and Waste Fitting with China Indexed Valves and Waste; Width 31 in.; Depth 19 in.; Height 21⅛ in.; For either Right or Left Hand Corner.

Length Over-all, Ft.	5	5½	6
Weight Each, Lbs.	960	1010	1070
No. 14A—"A" Grade, Each	$175.00	185.00	210 00
No. 14B—"B" Grate, Each	125 00	135.00	160 00

State whether Right or Left Hand is wanted

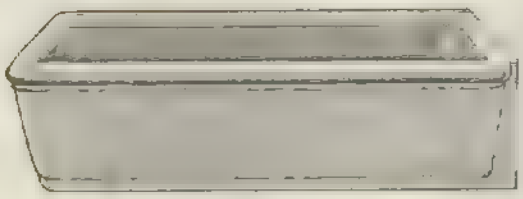


AVON BATH

Glazed Inside and over Roll Rim and around Base; Finished Plain White Outside; Fitted with Nickel Plated Combination Bell Supply and Waste Fitting, with China Indexed Compression Valves and Waste; Width 30 in.; Depth 17 in.; Height 21 in.

Nominal Length, Ft.	4½	5	5½
Weight Each, Lbs.	590	640	690
No. 15A—"A" Grade, Each	$130.00	135 00	145.00
No. 15B—"B" Grade, Each.	112.00	117.50	125.00

LIGHT WEIGHT PORCELAIN BATH TUBS



EVOLUTION BATH

A Light Weight Bath Tub of Semi-Vitreous Solid Porcelain Ware; Nearly 100 Lbs. lighter than an ordinary Solid Porcelain Bath; Weighs little more than Enameled Iron Baths of like design and costs no more to install; Semi-Vitreous Ware is burned to a temperature of about 2500 degrees Fahrenheit; the glaze is therefore extremely hard and has greater durability and permanence of finish; Is more easily cleaned and kept clean than an Enameled Bath Tub which is finished at about 1600 degrees Fahrenheit; Width 30 in.; Inside Depth 17 in.; Height Over-all 18½ in.; Outlet is 9 in. from end of Tub to center of Outlet; From back of Tub to center of Outlet is 15 in.

Length Over-all, Ft.	5	5½	6
Weight Crated, Lbs.	500	675	775
No. 23EA—"A" Grade, Each	$75 00	85 00	100.00
No. 23EB—"B" Grade, Each.	57 00	62 00	68 00

When ordering, state if for Right or Left corner as you face Bath, also if for exposed or concealed Fittings

EVOLUTION BATH

These Light Weight Bath Tubs are One Piece and when tiled in walls and floor there are no cracks nor joints where vermin can harbor or dirt collect. The same glazing and care in manufacture is used on the outside of the Tub on all exposed parts as on the inside; a feature not provided in any other Tub is the Anti-Splash Rim which has for its purpose, not alone the prevention of the splashing of water, but affords a substantial hand grip, enabling the bather to assist himself when assuming an upright position; Width 30 in.; Inside Depth 17 in.; Height Over-all 18½ in.; Outlet is 9 in. from end of Tub to center of Outlet; From back of Tub to center of Outlet is 15 in.

Length Over-all, Ft.	5	5½	6
Weight Crated, Lbs.	500	675	775
No. 24EA—"A" Grade, Each	$75.00	85 00	100 00
No. 24EB—"B" Grade, Each	57.00	62 00	68.00

When ordering, state if desired for Fittings at Right or Left end or at back of Tub

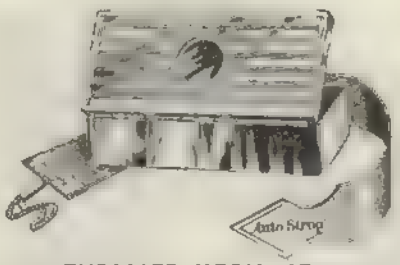
AUTO STROP SAFETY RAZORS

STANDARD SETS

Razor, 12 Blades, Shell Horse Hide Strop and 4½x1½ in. Case

Per Set

No. 1—Black Leather Case, Satin Lined; Silver Plated Razor. $5 00
Weight 7 Oz. per Set

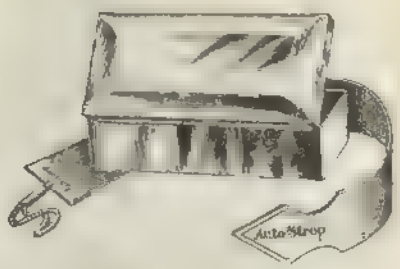


EMBOSSED METAL SETS

Razor, 12 Blades, Shell Horse Hide Strop and 4½x1½ in. Case

Per Set

No. 251—Embossed Nickel Plated Case; Silver Plated Razor $5 00
Weight 8 Oz. per Set

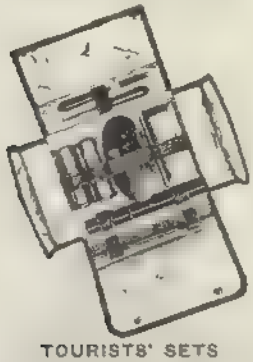


METAL CASE SETS

Razor, 12 Blades, Shell Horse Hide Strop and 4½x1½ in. Case

Per Set

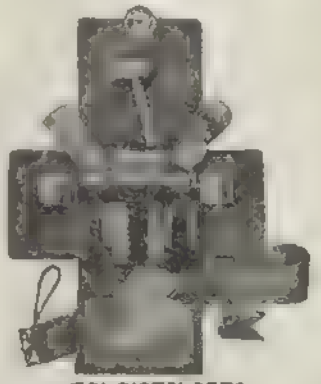
No. 50—Nickel Plated Case, Satin Lined, Silver Plated Razor $5.00
Weight 8 Oz. per Set



TOURISTS' SETS

Per Set

No. 500A—Black Seal Grained Leather Traveling Set, Leather Lined, Box Shaped; Silver Plated Razor, in Nickel Plated Box; Rubberset Lather Brush and Stick of Colgate's Shaving Soap in Silver Plated, Push Bottom Tubes, Ebony Hand Drawn Military Brush; Comb, Black Celluloid Tube for Tooth Brush, Cuticle Knife and Nail File.....$10.00
Weight 28 Oz. per Set



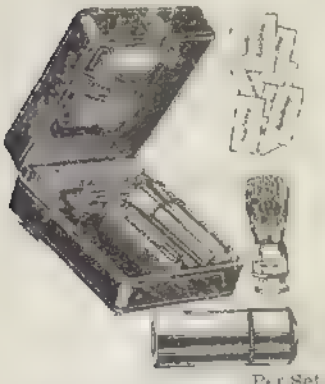
TOURISTS' SETS Per Set

No. 27—Morocco Grain Black Leather Case, Leather Lined, Box Shaped, Auto Strop Safety Razor Set in handsome Nickel Plated Case; Rubberset Shaving Brush and Colgate's Soap in Silver Plated Push Bottom Tube; Fine Shell Horse Hide Strop and 12 Blades..... $7 50
Weight 25 Oz. per Set

Per Set

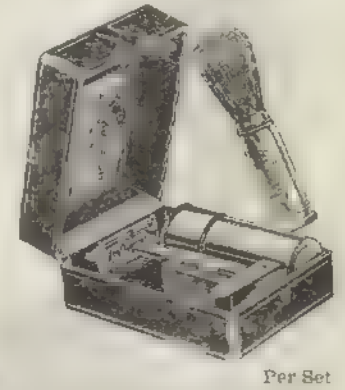
No. 25—Morocco Grain, Black Leather Case; Silver Plated Razor; 12 Blades; Shell Horse Hide Strop; 5x3¾ in. Case; Good Quality Rubberset Lather Brush; Stick of Colgates Shaving Soap in Silver Plated Push Bottom Tube $6.50
Weight 13 Oz. per Set

STROPS AND BLADES



Per Set

No 20—Morocco Grain, Black Leather Case; Silver Plated Razor; 12 Blades; Shell Horse Hide Strop; 5x3¾ in. Case; Good Quality Rubberset Lather Brush; Stick of Colgate's Shaving Soap in Silver Plated Push Bottom Tube $6.50
Weight 13 Oz. per Set



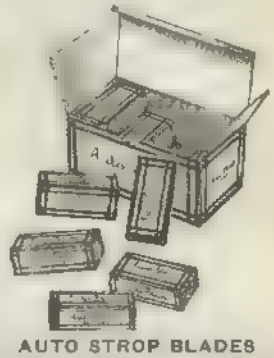
Per Set

No. 15—Morocco Grain, Black Leather Case; Silver Plated Razor; 12 Blades; Shell Horse Hide Strop; 4½x3¼ in. Case; Collapsible Rubberset Lather Brush; Stick of Colgate's Shaving Soap in Silver Plated Push Bottom Tube $5.00
Weight 13 Oz. per Set

AUTO STROP STROPS

Fine Grade Shell Horse Hide, a Preparation containing no Emery or other harmful substance is worked into the Leather, permanently insuring best results in connection with Auto Strop Safety Razors.

No. 3AS—Length 14 in., Width 1¼ in. .$0 50
Half Dozen in a Box
Weight 1 Oz. Each



AUTO STROP BLADES

These Blades are manufactured especially for use in Auto Strop Safety Razors; Each Blade is contained in a Moisture Proof Paper Wrapper. Per Package

No. 1AB—12 Blades in a Package; 12 Packages in a Carton $1 00
Weight 10 Oz. per Carton

No. 2AB—8 Blades in a Package; 12 Packages in a Carton 50
Weight 6 Oz. per Carton

GILLETTE COMBINATION SAFETY RAZOR SETS

Case 10x10x5 inches Per Set

No. 427—Set consists of Triple Silver Plated Razor and 12 double-edged Blades; fine quality Gillette Badger Hair Shaving Brush in Silver Plated Holder; Stick Gillette Shaving Soap in Silver Plated Holder; Triple Silver Plated Mounted Cut Glass Tooth Brush Holder; Talcum Powder and Perfume Bottles; Hand Soap Box; Pair Ebony Military Hair Brushes, Ebony Clothes Brush; Comb, Manicure Set and Mirror; Seal Grain Leather Roll. Weight 5¼ Lbs.....$25 00

Case 11x8x3¾ inches Per Set

No. 417—Set consists of Triple Silver Plated Razor and 12 double-edged Blades, fine quality Gillette Badger Hair Shaving Brush in Silver Plated Holder; Stick Gillette Shaving Soap in Silver Plated Holder; Triple Silver Plated Mounted Tooth Brush Holder; Pair Ebony Military Brushes; Comb, Manicure Set and Mirror; All contained in Seal Grain Leather Roll. Weight 4 Lbs. $20.00

Case 12x9x3¾ inches Per Set

No. 423—Set consists of Triple Silver Plated Razor and 12 double-edged Blades; fine quality Gillette Badger Hair Shaving Brush in Silver Plated Holder; Stick Gillette Shaving Soap in Silver Plated Holder; Triple Silver Plated Mounted Talcum Powder and Perfume Bottles and Tooth Brush Holder; Ebony Hair Brush, Comb and Mirror; All contained in a Seal Grain Case, Weight 4 Lbs. $16 00

Per Set

No. 422—Triple Silver Plated Razor, Good Quality Badger Hair Shaving Brush and Stick of Gillette Shaving Soap in Triple Silver Plated Holder; Plate Glass Mirror, English Pigskin Case, Size 6x4x2¼ in.....$9 00

No. 421G—Gold Plated Razor, otherwise same as No. 422 .. .. ..12 00

Weight 16 Oz. per Set

Per Set

No. 00—Triple Silver Plated Razor; Good Quality Badger Hair Shaving Brush and Stick of Gillette Shaving Soap in Triple Silver Plated Holder, Seal Grain Leather Case, Size 6x4x2¼ in $6.50

No. 00G—Morocco Case with Gold Plated Razor, otherwise same as No. 00.$10.00

Weight 16 Oz. per Set

Per Set

No. 451—Triple Silver Plated Razor; Good Quality Badger Hair Telescope Lather Brush; Stick of Shaving Soap in Triple Silver Plated Holder; in Cowhide, Morocco Grain Leather Case; Size 4¼x4½x2⅛ in.....$6.00

Weight 13 Oz. per Set

GILLETTE ARISTOCRAT

French Ivory Case, designed to match the many other gentlemen's toilet articles which are so popular.

Per Set

No. 551—Triple Silver Plated Razor, in French Ivory Case, Size 3¾x2¾x1¾ in.; With One Dozen Blades.....$5.00

Weight 7 Oz. per Set

MILADY DECOLLETTE SAFETY RAZOR

For Women's Use Per Set

No. 552—14 Karat Gold Plated Frame and Handle; Each Set in a Satin Lined French Ivory Case, choice of colors, Purple, Old Gold, Green or Old Rose; Complete with One Dozen Blades .. . $5 00

Weight 5 Oz. per Set

GILLETTE BULL DOG

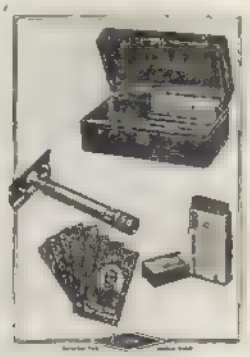
Per Set

No. 550—Oval Case of Gray Antique Leather; Triple Silver Plated Razor; Extra Large Handle; With One Dozen Blades.....$5.00

Weight 8 Oz. per Set

GILLETTE SAFETY RAZORS AND BLADES

The New Process Wafer Double Edge Blades and the adjustable feature enable the user to obtain a medium or close shave with the greatest degree of comfort



STANDARD SET, LEATHER CASE

Per Set

No. 460—Cowhide Morocco Grain Case Size 4x2½x2 in.; Triple Silver Plated Razor; 12 Blades in a Nickel Plated Box $5.00

Weight 6 Oz. per Set

STANDARD SET, NICKELED CASE

Per Set

No. 460B—Nickel Plated Case, Size 4½x2½x1⅝ in.; Triple Silver Plated Razor; 12 Blades in a Nickel Plated Box $5 00

Weight 8 Oz. per Set

EXTRA GILLETTE BLADES

Per Dozen

No. 12GB—Each Blade in a Separate Envelope; 12 Blades in a Box....$1.00
Ten Packages in a Carton
Weight of Carton (10 Packages) 14 Oz.

Per Package

No. 6GB—Half Dozen Blades in a Package, 20 Packages in a Carton $0 50
Weight 7 Oz. per Carton

GILLETTE POCKET EDITION

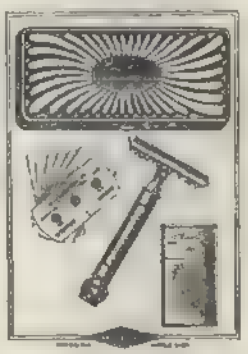
A compact Gillette Safety Razor which is very convenient for Travelers. Each Set contains One Dozen Double Edge Blades in a Nickel Plated Box

BASKET PATTERN

5x2½x1 In. Per Set

No. 501—Silver Plated Case and Triple Silver Plated Razor $5 00

Weight 7½ Oz. per Set



SHELL PATTERN

5x2½x1 In. Per Set

No. 502—Silver Plated Case and Triple Silver Plated Razor $5.00

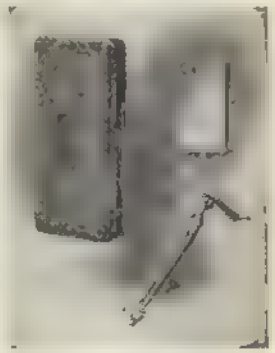
Weight 7½ Oz. per Set

FLORAL PATTERN

5x2½x1 In. Per Set

No. 503—Silver Plated Case and Triple Silver Plated Razor $5 00

Weight 7½ Oz. per Set



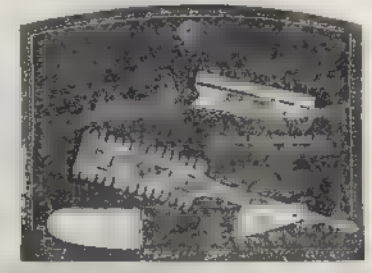
EMPIRE PATTERN

5x2½x1 In. Per Set

No. 504—Silver Plated Case and Triple Silver Plated Razor $5.00

Weight 7½ Oz. per Set

DURHAM DUPLEX RAZORS



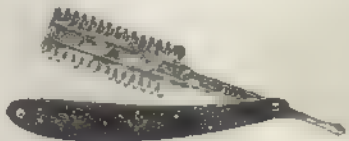
DURHAM DUPLEX DOMINO RAZORS

Combine the advantages of the Safety Razor with the good qualities of the old style Razor; the Blade is held flat to the face while shaving, allowing the correct diagonal stroke, while the Guard absolutely prevents cutting

Per Set

No. 604—Razor with Parisian Ivory Handle, Safety Guard Stropping Attachment and three Durham Duplex Double Edged Hollow Ground, High Carbon Steel Blades, in Neat Red Leather Roll Kit, Snap Fastening.$1 00

One Set in a Carton



DURHAM DEMONSTRATOR RAZORS

This Demonstrator Razor is for the purpose of acquainting the trade with the remarkable shaving qualities of the Durham Duplex Domino Razor; It is sold at an extremely low price simply to induce the prospective customer to try for himself the merits of the regular razor; the Blades are the same as those regularly furnished, but the Handle and Guard are of cheap construction.

Each

No. 605—Demonstrator Razor with Safety Guard and one Durham Duplex Double Edged Blade.....$0 35

One Set in an Attractive Carton

DURHAM DUPLEX BLADES

Double Edged, Hollow Ground, Finest Carbonized Steel, Perfectly Tempered, Honed and Stropped; Each Blade wrapped so that their edges do not come in contact with the Package, thus preserving their original Keen Edges

Per Dozen

No. 606—Six Blades in a Package.....$1 00
No. 607—Three Blades in a Package.. 1.00

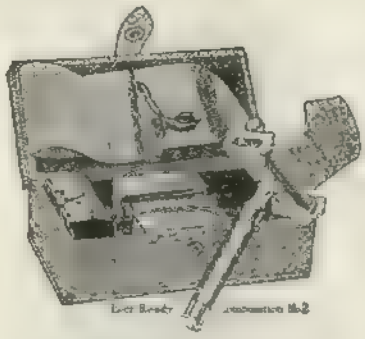
SAFETY RAZORS AND BLADES

EVER READY

Per Set

No. 840—Set Includes a Nickel Plated Frame with 3¾ in. Ebony Handle; A Stropping Handle to hold blades when stropped; 12 Blades and Compartments for holding them; Case is of Leatherette, Velvet Lined, with Metal Blade Compartment; Size 3¾x2½x1½ in.; Blades are 1⅝x¾ inches.....$1.00

Weight 6 Oz. per Set

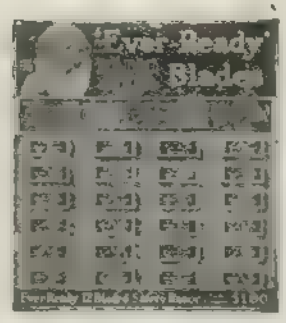


EVER READY COMBINATION

Safety Razor and Stropper Per Set

No. 842—Set consists of One Ever Ready Safety Razor, with 12 Blades in Metal compartments; the Stropper consists of a Leather Strop, Size 15x1¾ in. with Nickel Plated Frame and Handle; a handy combination for Travelers or others; Leatherette Case Size 4¾x-2¾x2 in.; Silver Stamping; Glove Snap Fastening.....$2 50

Weight 10 Oz. per Set



EVER READY RAZOR BLADE ASSORTMENT

Per Card

No. 847—One Gross Blades on Attractive Tin Display Card; Twelve packages of 10 Blades Each to retail at $0.50 per package, and Four packages of 6 Blades Each to retail at $0.30 per package. Cards packed One in Box. Size of Cards 11 inches square.... 7.20

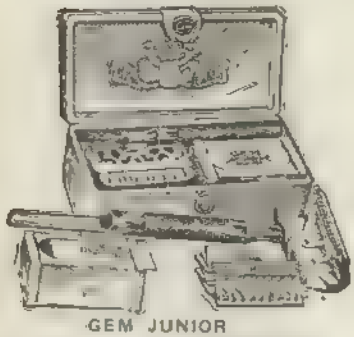
Weight 2¾ Lbs. per Card

We Do Not Break Above Cards

EXTRA EVER READY BLADES

Nos.	844	845	846
Blades in a Package.	6	10	12
Per Package	$0 30	.50	.60

Average Weight ¾ Oz. per Package

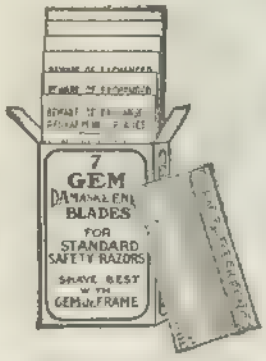


GEM JUNIOR

Per Dozen

No. 850—Nickel Plated Frame and Knurled Handle which is detachable for Stropping Blade and Packing; Complete with Seven Damascene Blades in Metal Box.....$12 00

Each Set in a Velvet Lined Case, Snap Fastening



GEM JUNIOR BLADES

Per Set

No. 851 Set Consists of Seven Blades made from Finest Sheffield Steel, Razor Stock, Hardened and Tempered to Keen Edge.....$0 35

Each Set in a Neat Carton

PENN SAFETY

Very simple and satisfactory; It is constructed of only two parts and cannot get out of order; It is sanitary and is very easily kept clean; the smooth Bar Guard (the safety device) does not irritate the skin and there are no teeth on it to get out of alignment.

Per Dozen

No. 600 Triple Silver Plated on a New Spring Design, Velvet Lined Steel Case, Covered with a Waterproofed Material of Hand Tooled Spanish Leather Finish; Complete with Five Penn-Sheffield Blades.....$12 00

One Set in a Case

PENN SAFETY BLADES

These Blades are uniformly perfect; Each one is automatically Hardened and Tempered, Hand Stropped and Tested; They undergo three independent inspections before packing at the Factory. Per Doz. Pkg.

No. 601—Five in a Package, One Dozen Mounted on Display Card.....$3 00

COUNTER DISPLAY CASE

This Case is made of Steel, [illegible] to [illegible] Wood at [illegible] It will hold one dozen Penn Razors, Has a Hinged Door at the back so that sales can be made directly from the Cabinet; 7 in. High, 6¾ in. Deep, 13 in. Wide

Case is furnished free to dealers with their initial order for one dozen Penn Razors and two dozen packages of Penn Blades.

Weight 10 Lbs. Each

ENDERS

The Frame is constructed so that the Blade does not rest on the Guard, allowing a free, clean cutting edge the entire length of the Blade

Per Dozen

No. 602—Solid Nickel Silver Frame; Nickel Plated Knurled Steel Handle; Complete with Six Best Quality Razor Steel Blades, Hand Finished and Tested, in a Neat Purple Silk Lined Case, with Button Clasp, Size 4½x2x1 in.....$12.00

Blade Only

Blades in Package

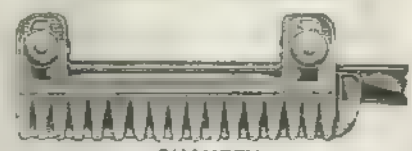
BLADES ONLY

Per Pkg. of 5

No. 603—Extra Blades for No. 602; Size 2x⅞ in.; Five Blades in an Oiled Paper Package.....$0.25

20 Packages, 100 Blades, in a Carton

RAZOR GUARDS



SHAVEZY

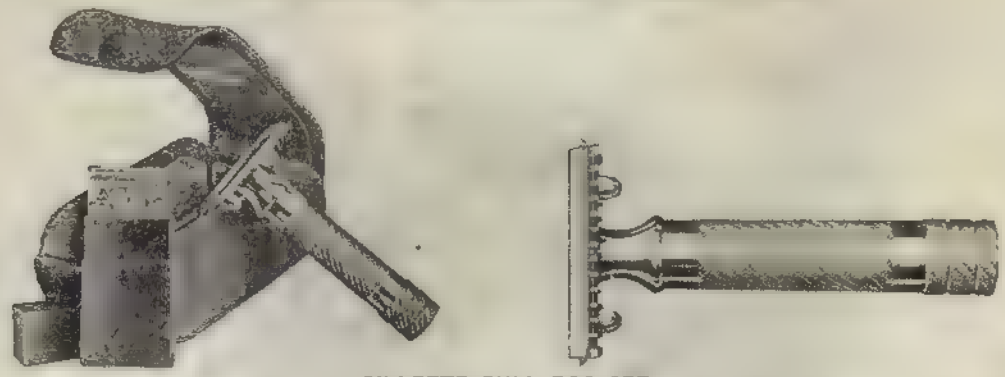
Makes a practical Safety Razor of any style of blade; It does not impair the full and perfect action of the Razor and makes it impossible to cut the face; It is adjustable to any width blade; Can be changed from right to left or be instantly removed.

Per Dozen

No. 3—Nickel Plated Brass; Length 2⅞ in.; Width adjustable to any Blade.$4.00

One Dozen in Box; Weight 8 Oz. per Dozen

GILLETTE SAFETY RAZORS



GILLETTE BULL DOG SET

The Bull Dog is the same as the Standard Set, shown on Page 2512 except with an Extra Large Handle and is contained in an Oval Case of Gray Antique Leather

Per Set
No. GBD—Triple Silver Plated; 12 Double Edged Blades.... $6 00

PENN SAFETY RAZORS AND BLADES

The Penn Safety is very simple and has proven satisfactory; It is constructed of only two parts and cannot get out of order; It is sanitary and is very easily kept clean; the smooth Bar Guard (the safety device) does not irritate the skin and there are no teeth on it to get out of alignment.

The Penn Safety is Triple Silver Plated and is packed in a neat spring hinged, velvet lined steel Case, covered with a waterproofed material of hand tooled Spanish leather finish.

Per Dozen
No. P5—Penn Safety Razor, Complete with Five Penn-Sheffield Blades $12.00
One Set in a Case

COUNTER DISPLAY CASE

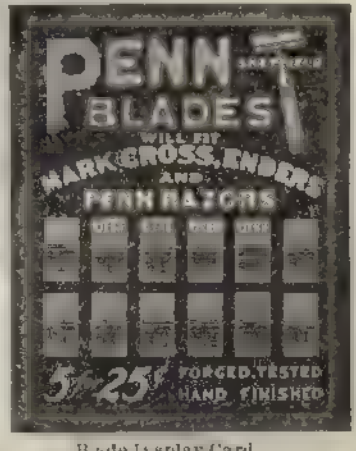
This Case is made of steel, lithographed to imitate Circasian Walnut; It will hold one dozen Penn Razors; Has a hinged Door at the back so that sales can be made directly from the Cabinet; Size, 7 in. High, 6¾ in. Deep, 13 in. Wide.

Case is furnished free to dealers with their initial order for one dozen Penn Razors and two dozen packages of Penn Blades

Weight 10 Lbs. Each

PENN SAFETY RAZOR BLADES

These Blades are uniformly perfect; Each one is automatically Hardened and Tempered, Hand Stropped and Tested; They undergo three Independent Inspections before packing at the Factory.

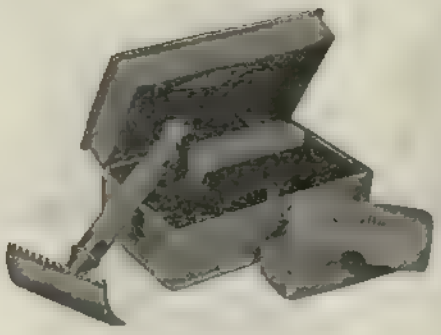


Blade Display Card

Per Doz. Packages
Penn Sheffield Blades, Five in a Package, One Dozen Packages Mounted on Display Card as shown above.. $2.00

SAFETY RAZORS

No Stropping
or Honing Required



Use Standard
Gillette Blades
Show on Page 2512

GILLETTE ARISTOCRAT

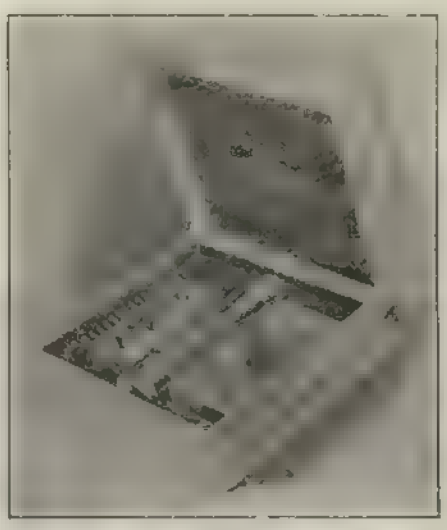
The New French Parisian Ivory Gillette Safety Razor Set

Designed to Match the many other Gentlemen's Parisian Ivory Toilet Articles such as Military Brushes, Combs, Mirrors, etc., which are so Popular

No. GA Triple Silver Plated Razor, Large Knurled Handle, Length Over all 3¼ in.; Set is Complete in Neat Parisian Ivory Case, Size 3¾x2¾ in.; 12 Blades in Parisian Ivory Box, with Extra Box for Dull Blades $5.00

Each Set in a Pasteboard Box

WOMENS' SAFETY RAZORS



MILADY DECOLLETE SAFETY RAZOR

For Women's Use

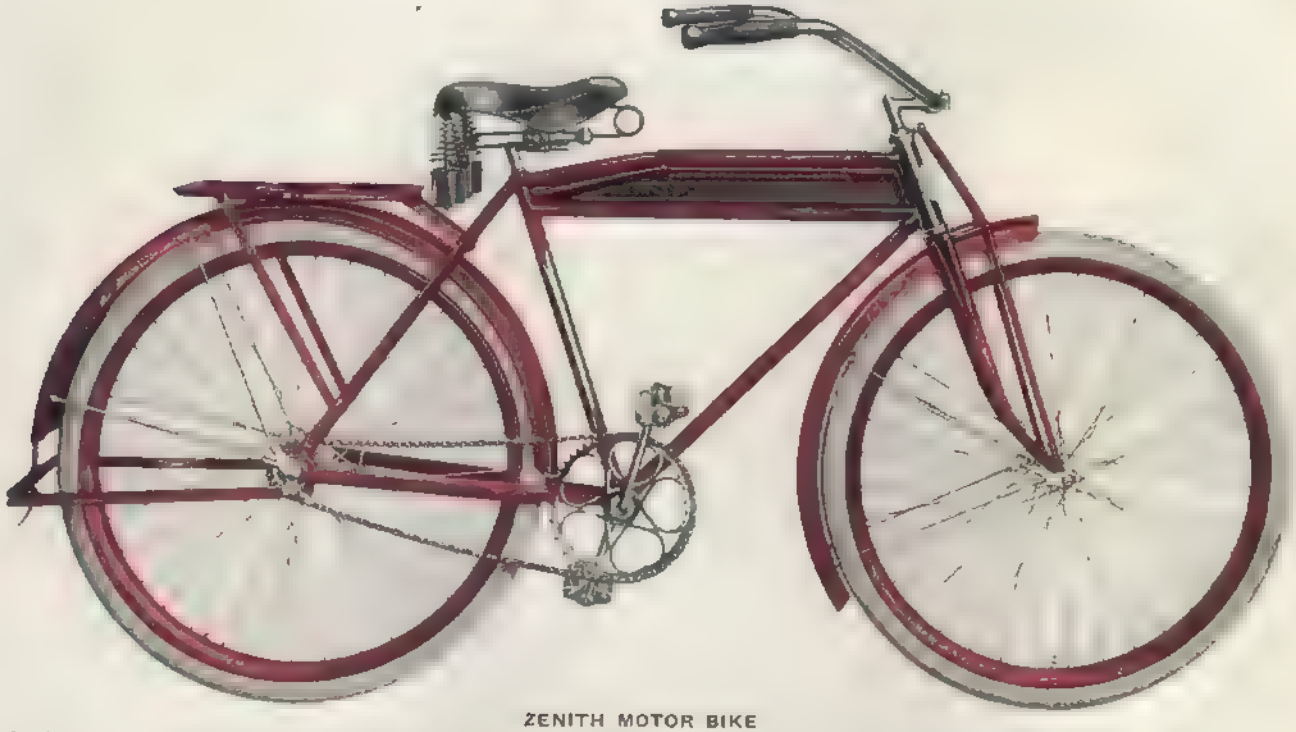
For the Refined Lady who wears a Sleeveless Evening Gown and is particular about all the details of a perfect Toilet which demands an underarm as smooth as the face this Decollete Safety Razor is a safe and sanitary way of acquiring the desired results. Very simple and easy to use merely a soap lather well rubbed in and a few strokes of the Blade, Impossible to cut the skin. Takes the regular standard Gillette Blade Shown on Page 2512.

Each

MILADY DECOLLETTE—14 Karat Gold Plated Frame and Handle, Each Set in a Satin Lined French Ivory Case, choice of colors, Purple, Old Gold, Green or Old Rose; Complete with One Dozen Blades $5.00

Each Set in a Pasteboard Box

MOTOR BIKES



ZENITH MOTOR BIKE

This is the best looking Bicycle ever produced that has the appearance of a Motorcycle; As you will note, it has a Special Sloping Motorcycle Frame, with re-inforcing Top Bar, which gives the rider a very low riding position, very similar to that found on a Motorcycle

	Each
No. ZM0—20 in. Frame, with Coaster Brake	$60.00

One in a Crate, Weight 60 Lbs Each

Specifications

Frame—1 in. Seamless Steel Tubing, Extra Heavy, Strongly Reinforced, All Flush Joints
Upper Tube—Motorcycle Design
Height—20 in. at Seat Post Mast
Wheels—28 in
Truss Fork—Motorcycle Style, as illustrated. Handsomely decorated.
Crank Hanger—Drop Forged, One Piece, 7 in.; Can be removed without disturbing Cups.
Finish—Handsomely Enameled in Deep Rich Indian Crimson Red, four coats; Hand rubbed, tastefully decorated, with Black Head and Seat Post Mast.
Front Hub—New Departure
Coaster Brake—New Departure.
Rims—One Piece Maple, Steel Lined Clincher, Enameled and Striped
Chain—Diamond Roller.
Sprockets—Front 26 Tooth Heart Pattern, 9 Tooth Rear.
Spokes—Highest Quality Diamond E; 36 in Front, 36 in Rear
Tires—No. 406, Bull Dog Clincher, 28x1¾ in., Guaranteed.
Handle Bar—No. MB4, Motorcycle Style, Extension; No. 5, Long Rubber Grips.
Saddle—No. 2, Auto Cushion Motorcycle Style
Pedals—No. 4P, Rubber, Motorcycle Style.
Tool Box—Metal, Enameled to Match, Contains Pump, Wrench, Oiler and Kit.
Guards—Metal, Enameled to Match, Deep Drop Sides, Motorcycle Style, Double Braces Front and Rear.
Stand—Motorcycle Style.
Package Carrier—Strongly Made, Detachable, Enameled to Match Bicycle

The Zenith Motorbike has a Special Sloping Motorcycle Frame with re-inforcing Top Bar which gives the rider a very low riding position, very similar to that found on a Motorcycle, the Front Fork has been re-enforced with a Truss reaching to the Steering Head of the Bicycle and supported at the Fork Crown, Equipped with Steel Tool Box fastened between the slanting Top Bar and the Supporting Lower Bar of the Frame; This Tool Box has a Hinged Door on the right hand side which gives the rider ample storage space for Tools, etc., in order to prevent rattling of the Tools, it is customary to wrap them up in a dust rag or folded cloth; This Tool Bag looks exactly like a gasoline tank on a Motorcycle and instantly "takes" with the young riders who are anxious to imitate a Motorcyclist as closely as possible

To give the Motorcycle appearance we have equipped this Model on the Rear with a strong Platform Carrier, supported by Braces reaching to the Frame. In front, beneath the Saddle, a Hinged Brace is clamped securely to the Rear Stays with two Screws and two special Bolts, the Carrier is of large dimensions and unusual strength.

The Rear Wheel is fitted with the new Quick-Action Motorcycle Stand of Drop Forged Channel Steel that can be dropped or raised instantly at the will of the rider; Locks automatically; the Handle Bars are of approved new style, similar to Motorcycle Bars, but of modified form to suit Bicycle usage.

OUR GUARANTEE

We Agree with the Purchaser of Each Zenith Bicycle to Make Good by Repair or Replacement any Defects in Material or Workmanship, provided the defective part is returned to us, Transportation Charges Prepaid; This Guarantee does not cover cost of repairing Bicycles damaged by accident, misuse or neglect and expires Dec. 31st of year in which Bicycle was bought.

MARSHALL-WELLS HARDWARE CO.

OVERLAND BICYCLES

OVERLAND, MEN'S, MODEL 15

This Model is constructed especially for those who desire an exceptionally Strong Bicycle; the Reinforced Truss Frame construction is of the latest and most approved design; the Extra Bar is placed where it gives the most strength

Equipped with Continental Clincher Tires and Coaster Brake

	Each
No. OC0—20 in. Frame; Net Weight 28 Lbs. Each	$50 00
No. OC2—22 in. Frame; Net Weight 28 Lbs. Each	50 00
No. OC4—24 in. Frame; Net Weight 28 Lbs. Each	50 00

All Wheels are Crated for Shipment; Shipping Weight 50 Lbs. Each

Specifications

Frame—Diamond, Made of 1 in., 19 Gauge Seamless Steel Tubing, All Flush Joints; the Curved Truss Bar is Solidly Brazed according to best engineering practice.

Wheels—28 in.

Fork Diamond Pattern, Drop Forged, Nickeled Crown; Seamless Fork Sides, Nicely Tapered

Crank Hanger—Drop Forged, One Piece, 7 in. Cranks, Removable without disturbing Cups.

Finish Handsomely Enameled in Brown and White, with White Head.

Front Hub—New Departure.

Coaster Brake—New Departure.

Rims One Piece Maple, Enameled to match Frame.

Chain—No 75, Diamond Roller, ⅞ in.; ½ in. Pitch.

Sprockets 26 Tooth Star Pattern Front, 9 Tooth Rear.

Spokes 14 16 Gauge, Swaged Piano Wire; 36 in Front, 36 in Rear.

Tires No. 103, Continental Clincher Guaranteed; Size 28x1⅝ in.

Handle Bars—No. 3, Forward Extension, with Rubber Grips

Saddle No. 13, with Cushion Comfort Spring

Pedals—No. 5P, Rubber, Motor Type, Wide Pattern.

Tool Bag No 8, Containing Pump Wrench, Oiler and Kit.

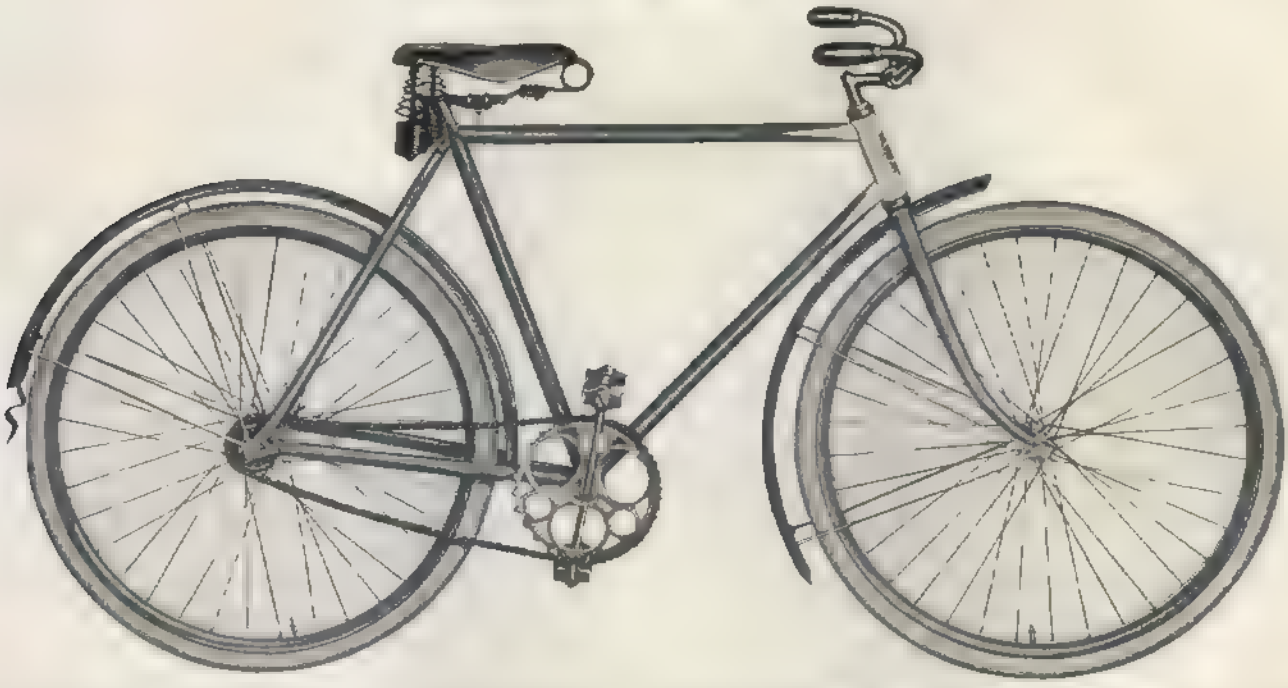
Guards Metal, Front and Rear Enameled with Center Stripe to Match Head; Leather Flap on Front Double Flat Brace on Rear

OUR GUARANTEE

We Agree with the Purchaser of Each Overland Bicycle to Make Good by Repair or Replacement any Defects in Material or Workmanship, provided the defective part is returned to us, Transportation Charges Prepaid; This Guarantee does not cover cost of repairing Bicycles damaged by accident, misuse or neglect and expires Dec. 31st of year in which Bicycle was bought.

MARSHALL-WELLS HARDWARE CO.

MARSWELLS BICYCLES



This Bicycle is acknowledged to be the most satisfactory ever sold at the price; Only good material is used in its construction, Dealers will find that it will build up their Bicycle business immensely

MEN'S MODEL, with Coaster Brake and Stand

Equipped with No. 358 Superior Guaranteed Single Tube Tires and Mud Guards; Blue, with White Trimmings and White Head

	Each
No. MB0—20 in. Frame	$40 00
No. MB2—22 in. Frame	40 00
No. MB4—24 in. Frame	40.00

MEN'S MODEL, with Coaster Brake and Stand

Equipped with No. 358 Superior Guaranteed Single Tube Tires and Mud Guards; Gray, with Maroon Trimmings and Maroon Head

	Each
No. MBB0—20 in. Frame	$40.00
No. MBB2 22 in. Frame	40.00
No. MBB4—24 in. Frame	40.00

MEN'S MODEL, with Coaster Brake and Stand

Equipped with No. 103 Continental Guaranteed Clincher Tires and Mud Guards; Gray, with Maroon Trimmings and White Head

	Each
No. MC0—20 in. Frame	$45.00
No. MC2—22 in. Frame	45.00
No. MC4—24 in. Frame	45.00

MEN'S MODEL, with Coaster Brake and Stand

Equipped with No. 103 Continental Guaranteed Clincher Tires and Mud Guards; Brown, with White Trimmings and White Head

	Each
No. MCB0—20 in. Frame	$45.00
No. MCB2 22 in. Frame	45 00
No. MCB4—24 in. Frame	45.00

Average Net Weight 25 Lbs. Each; Shipping Weight 45 Lbs.

LADIES' MODEL

	Each
No. MBL2—22 in. Drop Frame, with Coaster Brake; Blue, with White Trimmings; No. 358 Superior Guaranteed Single Tube Tires, Chain and Mud Guards	$46 00

SPECIFICATIONS FOR MEN'S WHEEL

Frame—Diamond; Made of 1 in., 19 Gauge, Seamless Steel Tubing, All Flush Joints.

Wheels 28 in.

Fork—Drop Forged, Nickeled, Oval Crown, Seamless Fork Sides.

Crank Hanger—Drop Forged; Cranks 7 in., One Piece; Removable without disturbing Cups.

Finish—Splendidly Enameled in colors given above.

Front Hub—Corbin.

Rims—One Piece Maple, Enameled and Striped to Match.

Chain—No. 75, Diamond Roller, ⅞ in.; ½ in. Pitch.

Sprockets—Front 26 Tooth, Circular Pattern; 9 Tooth Rear.

Spokes No 2 Swaged Piano Wire, 14-16 Gauge, 36 Front and Rear.

Handle Bar—No. 3 Extension, Adjustable.

Saddle No. 15, Eagle Scout, with Cushion Comfort Spring.

Pedals No. 4, Standard

Tool Bag—No. 8, Containing Pump, Wrench, Oiler and Kit.

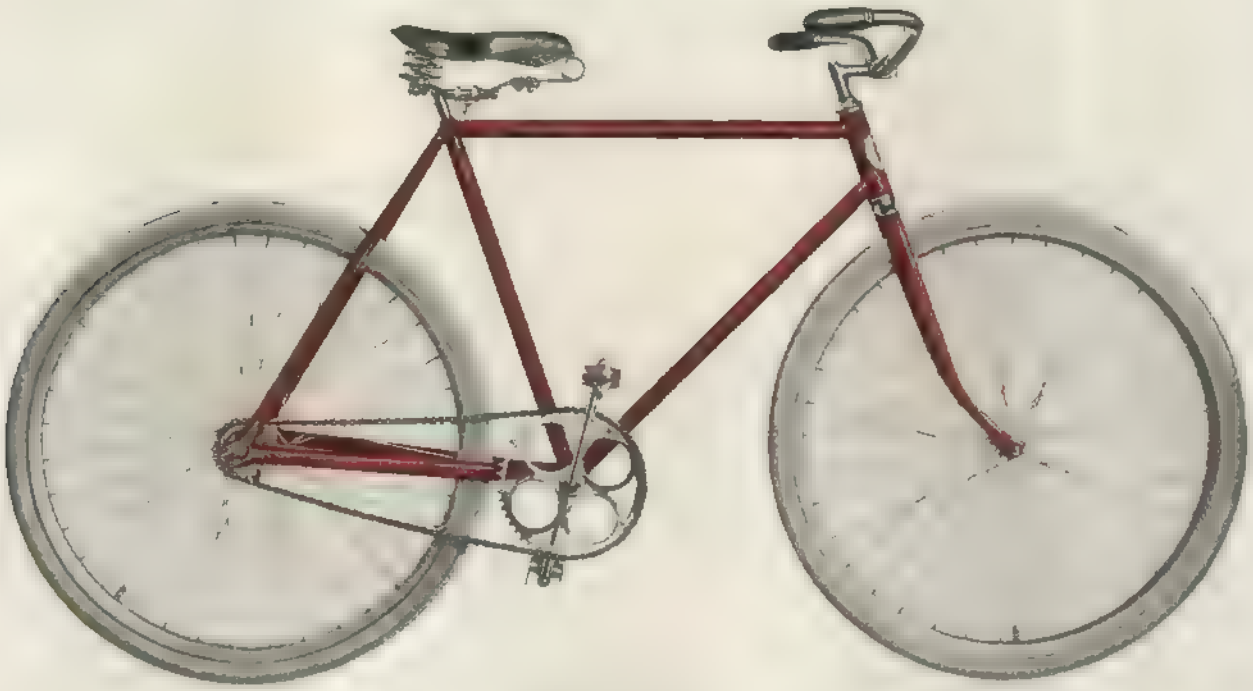
Stand—Rear Wheel is fitted with Stand that can be dropped or raised instantly at the will of the rider.

OUR GUARANTEE

We Agree with the Purchaser of Each Marswells Bicycle to Make Good by Repair or Replacement any Defects in Material or Workmanship, provided the defective part is returned to us, Transportation Charges Prepaid; This Guarantee does not cover cost of repairing Bicycles damaged by accident, misuse or neglect and expires Dec. 31st of year in which Bicycle was bought.

MARSHALL-WELLS HARDWARE CO.

KING BICYCLES



KING, MODEL 5

Made to meet the demand for low priced Bicycle of quality; Standard Guaranteed Equipment raises this Wheel far above the average low priced Bicycle

WITH COASTER BRAKE

Equipped with " Jack Rabbit" Guaranteed Single Tube Tires

	Each
No. K0—20 in. Frame	$30.00
No. K2—22 in. Frame	30.00
No. K4—24 in. Frame	30.00
	Extra, Pair
Steel Mud Guards, Front and Rear, to Match Frame	$1.50

WITH COASTER BRAKE

Equipped with No. 103 Guaranteed Clincher Tires

	Each
No. KC0—20 in. Frame	$35.00
No. KC2—22 in. Frame	35.00
No. KC4—24 in. Frame	35.00
	Extra, Pair
Steel Mud Guards, Front and Rear to Match Frame	$1.50

No Tool Bag or Tools Included in Equipment on This Bicycle

Average Net Weight 25 Lbs. Each; Shipping Weight 45 Lbs. Each

Specifications

Frame—Made of High Grade Steel Tubing, Flush Joints, Fish Mouth Reinforcements.
Fork—Oval Pattern, Nickel Plated.
Crank Hanger—One Piece, Round Pattern, 7 in. Crank.
Chain—½ in. Roller Bearing; ½ in. Pitch.
Handle Bars—No. 3, Extension.
Hubs—Turned, with Selected Steel Bearings.
Pedals—No. 1P, Pirate.
Saddle—No. 23, with Universal Spring.
Finish—Enameled Maroon.
Spokes—36 Front and 36 Rear.
Wheels—28 in.

Size of Rim

A Rim generally known as 28 in., actually measures 25 in., but with Tire applied, it measures 28 in. This same principle holds good, with all other size of Rims.

Correct Way to Measure Bicycle Frame

In order to determine the size of Frame measure from top of Seat Post Mast to center of Hanger Bracket.

How to Select Bicycle with Correct Size Frame for Any Rider

Distance from Top of Saddle to Pedal at Lowest Point

Frame, In.	20	22	24
Seat Lowered, In	29½	31½	33½
Seat Raised, In	32½	34	36

OUR GUARANTEE

We Agree with the Purchaser of Each King Bicycle to Make Good by Repair or Replacement any Defects in Material or Workmanship, provided the defective part is returned to us, Transportation Charges Prepaid; This Guarantee does not cover cost of repairing Bicycles damaged by accident, misuse or neglect and expires Dec. 31st of year in which Bicycle was bought.

MARSHALL-WELLS HARDWARE CO.

MARSWELLS JUVENILE BICYCLES

Many persons at first thought, would judge that because Juvenile Bicycles are smaller, they should sell at a considerably lower price than the full sized machine—not so, and for this reason the only saving in the cost is the price of the raw materials such as Steel, etc., before the Bicycle is made up, the labor is the same in the small Bicycle as in the full size, Our Juveniles are made strong and sturdy to meet the utmost abuse.

BOYS' MODEL

Equipped with No. 306 Guaranteed Single Tube Tires, Mud Guards and Stand; Blue with White Trimmings — Each

No. BC18—18 in. Frame; With Coaster Brake..... ....$40 00

GIRLS' MODEL

Equipped with No. 306 Guaranteed Single Tube Tires, Mud Guards and Stand; Blue with White Trimmings — Each

No. GB18 18 in. Drop Frame, With Coaster Brake..... $42.00

Net Weight About 20 Lbs.; Crated for Shipment 30 Lbs.

Specifications

Frame—18 in.; Made of Best Quality 1 in., 19 Gauge, Seamless Steel Tubing; All Flush Joints.

Wheels 26 in.

Fork—Drop Forged, Nickel Plated Crown, Fork Sides Nicely Tapered.

Crank Hanger—One Piece, 5½ in. Crank, Nickel Plated.

Finish—Nicely Enameled with four coats; Hand Rubbed; Blue with White Head.

Hubs—Concave Pattern, all Bearings Ground and Hardened.

Rims One Piece Maple, Enameled.

Chain—Diamond, ⅜ in.

Sprockets 22 Tooth Front, 9 Tooth Rear.

Spokes—No. 2 Piano Wire, 28 in each Wheel.

Tires—Single Tube, Guaranteed

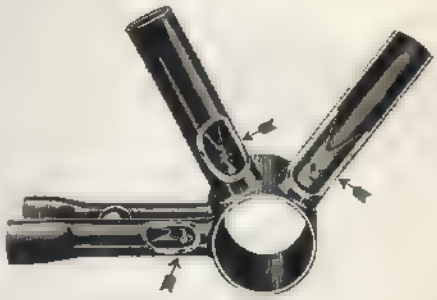
Handle Bars—Juvenile Adjustable, Leather Wound Grips

Saddle—Padded Juvenile.

Pedals—Standard, No. 11 or 12.

Tool Bag Oblong Shape; Contains Wrench, Oiler, Kit and Pump.

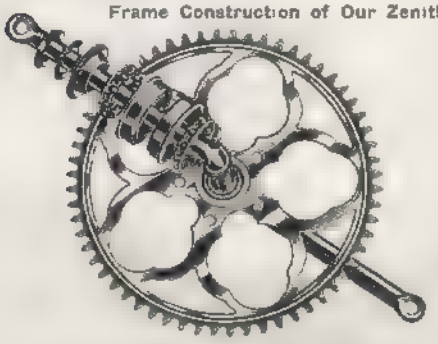
Coaster Brake—New Departure; Mud Guards, Front and Rear.



HANGER BRACKET

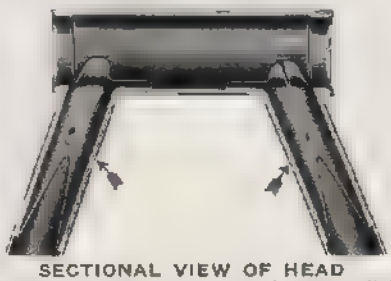
Note the reinforcements and manner of putting Extra Steel Pins in all parts that are subject to strain, and the evenness of Wall, which is not possible in Welded Tubing; Our Bracket construction consists of Seamless Tubing throughout; the Tool Steel Cups are pressed—not screwed into the Bracket.

Frame Construction of Our Zenith, Overland and Marswells Bicycles



ONE PIECE CRANK HANGER

This is the simplest and strongest Bicycle Crank Hanger in existence; the above illustration will show its great simplicity; After removing the Lock Nut, the Bearings are simply slipped off the Crank and the entire Crank Hanger may be drawn through the Frame without removing the Cups; In most Crank Hangers it is necessary to take out the Cups before it is possible to remove the Hanger; So simple is this Hanger that it does not require any experience to take it apart or put it together again; the Crank and Crank Shaft are made in One Piece; They are Carefully Forged from very Finest High Grade Carbon Spring Steel and warranted never to break or bend.



SECTIONAL VIEW OF HEAD

Made from finest quality 19 Gauge, Cold Drawn Seamless Tubing which is guaranteed not to crystallize; in making Frames, the parts are all cut to correct length, properly fitted and the Frame "lined up" in a jig, before being Pinned and Brazed, whereas in cheaply made Bicycles, the Frame is put together, Brazed and afterward "lined up;" It is actually bent into position which means that there is always a strain on the Tubing, All Brazed Joints in the Frame are immersed in a Crucible containing Molten Brass; the Brass runs in between all the Joints, reinforcements and connections from both inside and outside of Frame, making them one with each other, the Joint being absolutely perfect; Some Frames are merely Brazed in the fire and are Brazed on the outside only; Note the long Tapered "Fish Mouth" reinforcements at all connections.

½ IN. PITCH ROLLER CHAINS

Possibly the greatest improvement we have to offer in our 1917 line is the "½ in. Pitch" Roller Chain; This type of Chain has long been the standard chain on English Bicycles; These Chains are made ½ in. pitch which means there is one tooth to every ½ in. in circumference of the Sprocket, whereas on ordinary machines there is one tooth to every 1 in. in the circumference; the Hardened Steel Rollers roll off and on the teeth and the Sprockets having twice as many teeth, distribute the strain or pull on twice as many rollers—these little rollers performing the same operation as ball bearings and for all practical purposes, it might be called a "Ball Bearing Chain;" With this Chain and an accurately Milled Sprocket, every ounce of power applied to the Pedals is transmitted to the Rear Wheel.

SINGLE TUBE BICYCLE TIRES

NORTHERN KING, SINGLE TUBE
Guaranteed

Made of Fabric of Special Weave and Double Friction of High Grade; Has two plies of Egyptian Fabric and an Extraordinary Strong, Durable Tube; the Cover is also Strong and Tough and Compounded in such a manner that it will retain its resiliency; Has a Black Patent Linking Traction Tread, which prevents slipping.

	Per Pair
No. 452—28x1½ in.; Weight 4½ Lbs. per Pair	$7 00
No. 458—28x1⅝ in.; Weight 5¼ Lbs. per Pair	7 00

BLUE SPEED
Guaranteed

Made with an Extra Heavy Blue Tread; Non-Skid Cover; Good Quality, Heavy Inner Tube and two plies of Fabric, two regular plies and two extra plies on the Tread; These extra plies are the same weight as the Fabric used in the rest of the Tire; the Big Studs not only prevent skidding and slipping, but add to the Tread thickness and insure satisfactory service.

	Per Pair
No. 372—28x1½ in.; Weight 4½ Lbs. per Pair	$6.00
No. 378—28x1⅝ in.; Weight 5 Lbs per Pair	6.00

RED TOP
Guaranteed

Made of special weave fabric and double friction of the highest grade; Has two plies of Sea Island Fabric with an extra ply on the Tread; the style of Tread prevents slipping and offers the greatest resistance to wear.

	Per Pair
No. 362—28x1½ in.; Weight 4½ Lbs. per Pair	$5.00
No. 368—28x1⅝ in.; Weight 5 Lbs. per Pair	5.00

SUPERIOR, SINGLE TUBE
Guaranteed

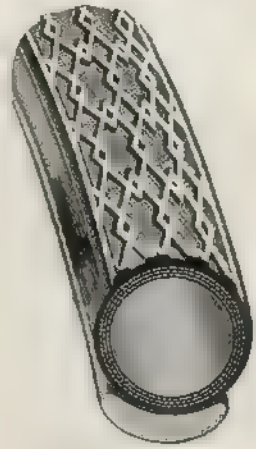
The Material used in this Tire is carefully selected; Made with an Extra Heavy Rubber Covering and two plies of Good American Fabric and High Quality Friction; Non-Skid Tread; Every effort has been put forth to make this Tire one of extreme value for the price.

	Per Pair
No. 304—24x1¾ in.; Weight 3½ Lbs per Pair	$5 00
No. 306—26x1½ in.; Weight 3¾ Lbs. per Pair	5.00
No. 312—28x1½ in.; Weight 4 Lbs. per Pair	5.00
No. 358—28x1⅝ in.; Weight 4¼ Lbs. per Pair	5 00

JACK RABBIT, SINGLE TUBE
Guaranteed

Made of two plies of High Grade American Fabric, with good Friction and a serviceable Inner Tube; Tread is made of a tough and resilient stock, especially to meet the demands for a moderate priced Tire.

	Per Pair
No. 322—28x1½ in.; Weight 4 Lbs. per Pair	$4.60
No. 328—28x1⅝ in.; Weight 5 Lbs. per Pair	4.50



STANDARD, SINGLE TUBE
Not Guaranteed

Made of two plies of Duck and a Heavy Tread of Rubber, a most satisfactory Tire; Low in price, but strong and serviceable.

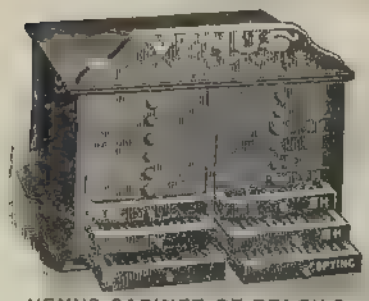
	Per Pair
No. 212—28x1½ in.; Weight 4½ Lbs. per Pair	$4.00
No. 258—28x1⅝ in.; Weight 5 Lbs per Pair	4.00

OUR GUARANTEE

We Guarantee Northern King, Blue Speed, Red Top, Superior and Jacket Rabbit Tires to be perfect in workmanship and material, and if any defect should develop within the season in which they are purchased of us, we will repair or replace without charge, **provided they are returned to us charges prepaid.** This guarantee does not cover punctures or damages caused by accident or negligence of the rider. This guarantee expires on December 31st of each season

Marshall Wells Hardware Co.

LEAD PENCIL ASSORTMENTS

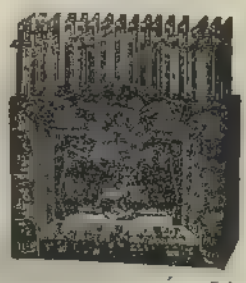


VENUS CABINET OF PENCILS

A very serviceable, complete and ornamental Cabinet with 18 numbered Drawers which will each hold a dozen Pencils

Per Assortment

No. 18—Assortment Contains 18 Dozen Drawing Pencils, One Dozen Each of the Seventeen Degrees of Hardness from the very softest to the hardest known and One Dozen No. 165 Venus Copying Pencils; Pencils are Hexagon Shape, Beautifully Finished in Reddish Brown with Faint Green Water Line visible through the Dark Background; Size of Cabinet 8½x10½x7 in. High.....$28.00
One Assortment in a Box; Weight 12 Lbs. per Assortment

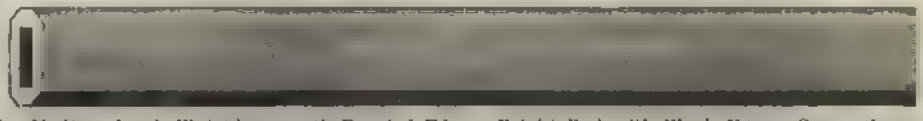


Per Assortment

No. 1688—Vaudeville Assortment Contains Six Dozen High Grade Lead Pencils, with Smooth Uniform No. 2 Lead; Assorted Six Colors, Maroon, Cedar Red, Blue, Tortise and Yellow; the Display Case is finished in Attractive Colors and represents a vaudeville show in action with spectators in boxes, etc.. .. .. $4.00

Weight 3 Lbs. per Assortment

CARPENTER'S PENCILS



Per Gross

No. 20—Zenith A1; 7 in. Medium Lead Flat Shape with Beveled Edges, Bright Red with Black Edges, Silver Stamp ... . $ 9 60
No. 21—Zenith A1; 9 in. Long; Otherwise same as above..... ... . 12.00
One Dozen in a Package, One-Quarter Gross in a Box, Weight, per Gross, 5 Lbs

Per Gross

No. 511—7 in., Medium Lead, Flat Shape with Beveled Edges, Polished Cedar Finish, Gilt Stamp.. ... . $9 00
One Dozen in a Package, Half Gross in a Box; Weight per Gross 3¼ Lbs.

Per Gross

No. 410—7 in ; Medium Lead, Oval Shape, Polished Cedar Finish, Bling Stamp $6 50
One Dozen in a Package; Half Gross in a Box, Weight 3¼ Lbs per Gross

Per Gross

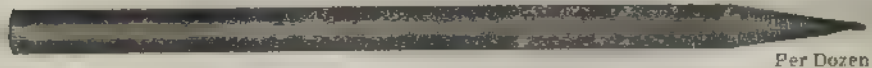
No. 514—7 in., Medium Lead, Oval Shape, White Wood, Natural Finish, 6 in. Rule Stamped in Blue..... $5 00
One Dozen in a Package, Half Gross in a Box; Weight per Gross 3 Lbs.

CHECKING CRAYONS

Per Gross

No. 61—Black; 6¾ in. Long ⅞ in Diam., Round Shape, Paper Wrapped, Pointed, For Marking Parcels and Stock, Rough Checking on Way Bills, Bulletins, etc.....$10.00
One Dozen in a Box, One Gross in a Carton; Weight 3⅝ Lbs. per Gross

ZENITH MARKING PENCILS



Per Dozen

No. 200—For Marking China, Glassware, etc.; 6¾ in. Long, ⅜ in. Diameter, Round Shape; Paper Wrapped; Pointed..... $2 20
Half Gross ina Box; Weight 3¾ Lbs. per Gross

COLORED CHECKING OR PARCEL PENCILS

Large Colored Lead, Round Shape, Cedar Finish, Blind Stamp, No Tip or Plug, 7 in. Long

Per Gross	Per Gross	Per Gross
No. 816—Green Lead... $9 00	**No. 817—Red Lead ....** $9.00	**No. 819—Blue Lead ..** $9 00

One Dozen in a Package, Half Gross in a Box; Weight 3 Lbs. per Dozen

RUBBER HEADS

Per Gross

No. 451½ Red Rubber, Wedge Shape, Will fit any Pencil; Prevents round Pencils from rolling off a slanting desk $2.00

One Gross in a Box

LUCKY CURVE FOUNTAIN PENS

(Full Size Cuts)

Each

No. 1 Lucky Curve Feed; Small, Plain Barrel, Black or Mottled, Small Pen $1 50

Each

No. 3G—Gentlemen's Size; Lucky Curve Feed; Chased Barrel; Straight or Taper Cap, Assorted Patterns $2 00
No. 3L—Lady's Size; Lucky Curve Feed, Chased Barrel, Straight or Taper Cap, Assorted Patterns 2 00

Each

No. 18—Lucky Curve Feed; Black, Mottled or Fancy Chased Barrel, "Anti-Break" Caps, and Ink Controller; Screw Joint $2 00

Each

No. 20½—Lucky Curve Feed; Fancy Chased Barrel and Caps; may be fitted with Gold Pen in Fine, Medium or Stub Point of any Elasticity $2 50

Each

No. 520½—Lucky Curve Feed; Fancy Chased Barrel and Cap, One Colored Crown on Cap $2 60
No. 620½—Lucky Curve Feed; Two Colored Crown on Cap, Otherwise same as Above. 2.75

Each

No. 23½G—Gentlemen's Size; Lucky Curve Feed; Beautiful Chased Barrel and Cap $3 00
No. 23½L—Lady's Size; Lucky Curve Feed; Beautiful Chased Barrel and Cap 3.00

Each

No. 6G—Gentlemen's Size; Lucky Curve Feed; Beautiful Chased Barrel, Mounted with Gold Bands, Assorted Pattern $3 00
No. 6L—Lady's Size; Lucky Curve Feed; Beautiful Chased Barrel, Mounted with Gold Bands; Assorted Pattern 3 00

Each

No. 10—Lucky Curve Feed, Corrugated Barrel; prevents Slipping from Fingers $3.50

Each

No. 21½—Lucky Curve Feed; Fancy Chased Barrel and Cap; Gold Bands $3 50
No. 521½—Lucky Curve Feed, One Colored Crown on Cap, Otherwise same as Above 3 60
No. 621½—Lucky Curve Feed; Two Colored Crown on Cap; Otherwise same as Above 3 75

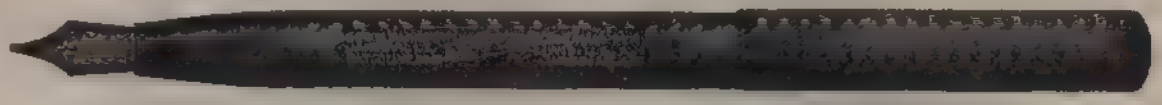
Above Pens, One in a Box

Regular Postage 2 Cents; Registered 12 Cents

LUCKY CURVE FOUNTAIN PENS

(Full Size Cuts)

Each
No. 9—Lucky Curve Feed; Plain Barrel, Gold Mounted, Large Ink Reservoir..... $4 00

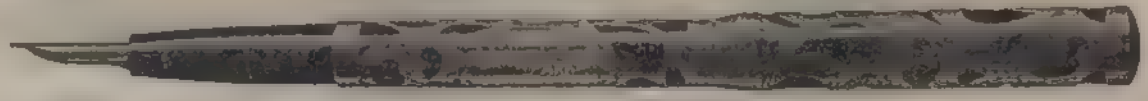


Each
No. 24½—Lucky Curve Feed, Fancy Chased Barrel and Cap..... $4 00

Each
No. 42½—Lucky Curve Feed; Fancy Chased Barrel and Cap, Two Gold Bands, Space on Center Band to Engrave Name..... $4 50

Each
No. 34—Lucky Curve Feed; Plain Barrel and Cap, with Sterling Silver Scroll and Crown..... $4 50
No. 33—Lucky Curve Feed; Gold Scroll and Crown; Otherwise same as Above..... 5 50

Each
No. 25—Lucky Curve Feed; Plain Barrel and Cap, Large Ink Fountain..... $5 00



Each
No. 14—Lucky Curve Feed, Sterling Silver Filigree inlaid over Vulcanite, Space on Filigree for Engraving Name..... $5 00
No. 16—Lucky Curve Feed; Gold Plated Filigree, Otherwise same as Above..... 6 00

Each
No. 45—Lucky Curve Feed; Corrugated Pearl Slab on Barrel, Pearl Crown on Cap; Three Gold Bands..... $6.50

Each
No. 28—Lucky Curve Feed; Plain Barrel and Cap; No. 8 Pen; for Professional Use..... $7 00

Each
No. 15—Lucky Curve Feed; Tinted Pearl Slabs and Two Gold Bands on Barrel; Cap Covered with Gold Filigree, Space on Filigree for Engraving Name..... $7 00

All Above, One Pen in a Box

Regular Postage 2 Cents; Registered 12 Cents

LUCKY CURVE FOUNTAIN PENS

(Full Size Cuts)

Each

No. 31—Lucky Curve Feed; Rich Sterling Silver Design on Barrel and Cap; Space on Design for Engraving Name. $7.50

Each

No. 44—Lucky Curve Feed; Beautiful Sterling Silver Designed Covering over Barrel and Cap; Space on Barrel to Engrave Name. $8 00

No. 43—Lucky Curve Feed; Gold Plated Covering; Otherwise same as Above. 10.00

Each

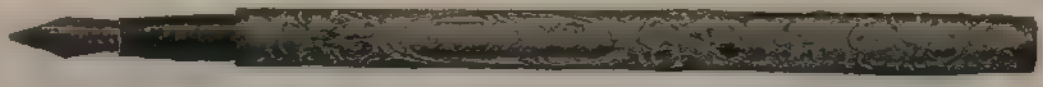
No. 41—Lucky Curve Feed; Beautiful Gold Filigree on Barrel and Cap; Space on Filigree for Engraving Name. $8 50

Each

No. 46—Lucky Curve Feed; Corrugated Pearl Slabs and Two Gold Bands on Barrel; Gold Plated Covering on Cap, Space on Cap for Engraving Name. $10.00

Each

No. 47—Lucky Curve Feed; Beautiful Pearl Slabs and Two Gold Bands on Barrel; Gold Floral Designed Covering over Cap; Space on Cap for Engraving Name. $10.00



Each

No. 35—Lucky Curve Feed, Beautiful Hand Engraved Gold Floral Design Entirely Covers Barrel and Cap, Space on Barrel for Engraving Name $10.00

Each

No. 50—(Emblem) Lucky Curve Feed; Plain Barrel on Cap; Solid Gold Band adorns the Cap; Emblems representing any of the prominent secret Societies may be mounted on this Pen. $12 00

Each

No. 40—Lucky Curve Feed; Beautiful Solid Gold Floral Design, in Relief, entirely covers Barrel and Cap; Space left on Barrel for Engraving Name; in Handsome Plush or Morocco Box $20 00

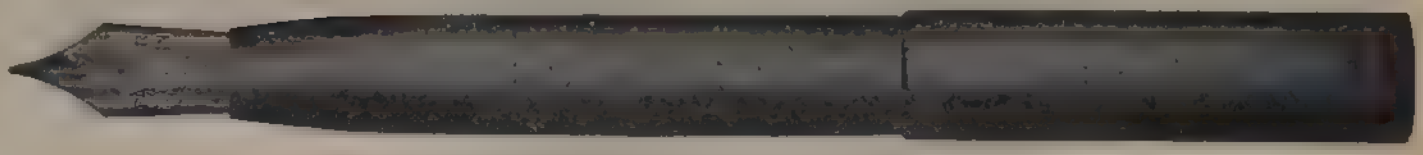
All Above, One Pen in a Box

Regular Postage 2 Cents; Registered 12 Cents

LUCKY CURVE FOUNTAIN PENS

For Special Points of excellence in the construction of Parker Fountain Pens, see Page 2804

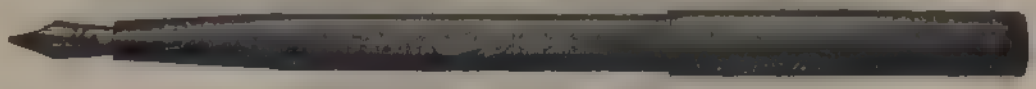
(Full Size Cuts)



RED GIANT

The Largest Fountain Pen ever made for Practical Purposes. In constant use the hand tires more quickly with a small pen than a large one. The Red Giant is fitted with a No. 12 Gold Pen in either Fine, Medium or Coarse Points, which with the large size barrel makes it a most convenient and comfortable pen for continuous writing.

	Each
No 1G—Largest Size; Lucky Curve Feed; Plain Black Rubber Barrel; Length Over-all 8¾ inches; No. 12 Pen	$10 00



SCREW JOINT

A Convenient Size for General Purposes

	Each
No 20—Medium Size; Lucky Curve Feed; Plain Black Rubber Barrel, Length Over all 6⅜ inches	$2 50
No. 20C—With Chased Barrel, Otherwise same as No. 20	2 50

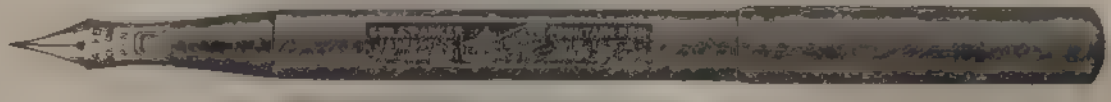
SCREW JOINT

	Each
No. 23—Medium Size, Lucky Curve Feed; Plain Black Rubber Barrel; Length Over-all 6¾ inches; No. 3 Pen	$3 00

Note—This pen can be furnished with same size Barrel as No. 20, but the Pen is a full size larger.

A Very Neat and Attractive Pen

	Each
No 21—Regular Size; Lucky Curve Feed; Plain Black Rubber Barrel with Two Gold Bands; Length Over-all 6 inches	$3 50
No. 21C—With Fancy Chased Barrel, Otherwise same as No. 21	3 50



SCREW JOINT

Fitted with a Gold Pen which is an Exact Duplicate of the Steel Falcon

	Each
No. 24—Black Rubber Barrel; Lucky Curve Feed; Length Over-all 6⅝ inches, Gold Falcon Pen	$4 00

All Above, One in a Box

Note—Any Parker Fountain Pen can be supplied with either a Fine, Medium, Coarse or Stub Point. They can also be supplied in almost any degree of flexibility so the hand of young or old can be accurately and satisfactorily fitted.

Regular Postage 2 Cents; Registered 12 Cents

LUCKY CURVE FOUNTAIN PENS

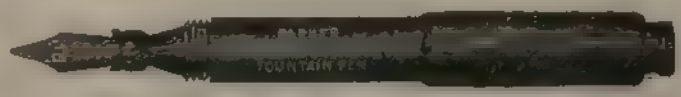
JACK-KNIFE SAFETY

This is a new departure in Fountain Pens. There have been "Safety" Fountain Pens on the market for some time. These, however, were too complicated and awkward with so much mechanism to get out of order.

The Parker "Jack Knife" Safety Pen is free from this trouble. It is simplicity itself. In the end of the regular cap is set a secondary or safety cap, held in place by a screw thread. The Regular Cap is screwed over the Nozzle the proper distance, then by simply giving the little Safety Cap a turn the pen becomes a safety. This is accomplished by the fact that the end of the safety cap comes in contact with the end of the Nozzle, making an ink tight joint, thus enclosing the pen in an ink tight compartment. When the Regular Cap is unscrewed the turning of the cap allows the pen point to drain out and carry back to the Reservoir all free ink in which the pen may have been immersed.

Made in a variety of sizes suitable for all purposes. They can be carried in a bag upside down or flat, or any other way with entire safety thus making them ideal pens for Ladies. Gentlemen carry them in the Pants Pocket with the Jack Knife, or flat in the Vest Pocket, as most convenient. For this reason they are not so easily lost as the ordinary Fountain Pen which must be carried in the Pocket, point upward.

(Full Size Cuts)



Fits Perfectly in a Small Pocket or Ladies' Purse

Each

No. 20SB—Baby Size; Lucky Curve Feed; Plain Black Rubber Barrel; Length Over-all 3⅜ in. $2 50

A Serviceable Pen under all conditions

Each

No. 20SR—Regular Size, Lucky Curve Feed, Plain Black Rubber Barrel; Length Over-all 5 inches $2 50

Can Furnish with Chased Barrel on Special Order

Each

No. 23S—Gentlemen's Pen; Lucky Curve Feed, One Size Larger than No. 20R Plain Black Rubber Barrel; Length Over all 5¾ inches $3 00

Each

No. 24S—Gentlemen's Pen; Lucky Curve Feed; One Size Larger than No. 23; Plain Black Rubber Barrel; Length Over-all 5¾ inches $4 00

Each

No. 25S—Gentlemen's Pen; Lucky Curve Feed; Largest Size Safety Pen; Plain Black Rubber Barrel; Length Over-all 6⅛ inches $5 00

The Gold Bands give this Pen a very rich and artistic finish

Each

No. 20SG—Regular Size, Lucky Curve Feed, With One Gold Band, Plain Black Rubber Barrel; Length Over-all 5 inches $3 00

No. 220SG—With Two Gold Bands, Otherwise same as No. 20SG 3.50

Beautifully mounted and fitted with a small ring on cap to suspend by chain; Space on mountings for engraving name

Each

No. 14S—Baby Size; Lucky Curve Feed, With Sterling Silver Filigree Mountings; Same size as No. 20SB; Plain Black Rubber Barrel; Length Over-all including Ring 4 inches $5 00

No. 16S—With Rolled Gold Filigree Mountings Otherwise same as No. 14S 6.00

All Above, One in a Box

Note—Any Parker Fountain Pen can be supplied with either a Fine, Medium, Coarse or Stub Point. They can also be supplied in almost any degree of flexibility so the hand of young or old can be accurately and satisfactorily fitted.

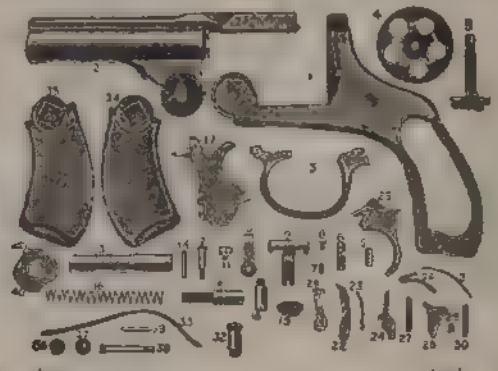
Regular Postage 2 Cents; Registered 12 Cents

COMPONENT PARTS OF HARRINGTON & RICHARDSON REVOLVERS

FOR REVOLVERS PATENTED OCTOBER 4, 1887

AUTOMATIC, POLICE AUTOMATIC, PREMIER AND BICYCLE

In Ordering, give Caliber and Number of Shots, state whether for Blued or Nickled Finish Revolver, Hammer or Hammerless and give Name or Number of Parts and if possible send us Broken or Worn Parts.



Nos.	Each
2—Barrel 3½ in.	$1 [illegible]
Barrel 4 in.	1 [illegible]
Barrel 5 in.	[illegible]
Barrel 6 in.	2 [illegible]
9—Barrel Lever	[illegible]
12—Barrel Catch Screw	[illegible]
10—Barrel Catch Spring	[illegible]
31—Barrel Lever Spring Screw	[illegible]
24—Cylinder Catch	[illegible]
6—Cylinder Catch Bolt	[illegible]
7—Cylinder Catch Bolt Spring	[illegible]
8—Cylinder Catch Bolt Screw	[illegible]
4—Cylinder Complete	1 [illegible]
37—Escutcheon Head	[illegible]
36—Escutcheon, Threaded	[illegible]

Nos.	Each
5—Ejector Rod	$1 [illegible]
15—Ejector Rod Latch	[illegible]
14—Ejector Rod Spring	[illegible]
[illegible]	[illegible]
31—Ejector Spring	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]

Nos.	Each
21—Lever [illegible]	$[illegible]
43—Main Spring	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
28—Screw	[illegible]
30—Sear Spring	[illegible]
10—Screw	[illegible]
[illegible] Stock Left	[illegible]
[illegible] Stock Right	[illegible]
[illegible]	[illegible]
[illegible] Screw	[illegible]
3—Trigger	[illegible]
29—Trigger Pin	[illegible]
29—Trigger Spring	[illegible]

ADDITIONAL PARTS FOR HARRINGTON AND RICHARDSON HAMMERLESS REVOLVERS

	Each		Each		Each
Cylinder Stop Frame Part	$0 15	Firing Pin Spring	$ [illegible]	Trigger Part	$0 15
Firing Pin	10	Frame Part Screw	.05	Trigger Part Spring	02
Firing Pin Nut	10				

FOR SAFETY HAMMER, YOUNG AMERICA, MODEL 1904 AND MODEL 1905 REVOLVERS

In ordering, give Caliber, state whether for Blued or Nickeled Finish Revolver, give Number if any stamped on Butt, and give Name and Number of Parts, and if possible send us Broken or Worn Parts

Nos.	Each
1—Barrel [illegible]	$[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
3—[illegible]	[illegible]
4—[illegible]	[illegible]
6—[illegible]	[illegible]
5—[illegible]	[illegible]
2—[illegible]	[illegible]
25—[illegible] Head	[illegible]
26—[illegible]	[illegible]
17—[illegible]	[illegible]
18—[illegible]	[illegible]
42—Gate	20

Nos.	Each
13—[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
10—[illegible]	[illegible]
23—[illegible]	[illegible]
8—Hammer Screw	[illegible]
11—Lever	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible] Safety Hammer	50

Nos.	Each
[illegible]	[illegible]
2—[illegible]	$[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
27—Stock Screw	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible] Spring	10

GUN MATERIAL

HAMMERS

Measured on Side, from Center of Pin to Center of Hammer Face

With the exception of Nos. 14R and 14L all Hammers on this page are for Breech Loading Guns. Illustrations are all full size

FLAT BODY, 1⅛ in.
Concave, Filed

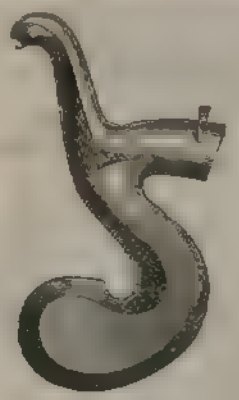
	Per Doz.
No. 1R—Right Hand.	$9 60
No. 1L—Left Hand.	9 60

BONEHILL, Beveled Edge, Polished and Engraved, 1⅛ in.

	Per Doz
No. 2R—Right Hd.	$14.00
No. 2L—Left Hd.	14 00

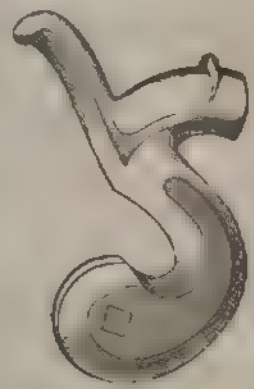
GREENER, 1⅜ in
Beveled Edge, Polished and Engraved

	Per Doz.
No. 3R—Right Hd.	$14 00
No. 3L—Left Hd.	14 00



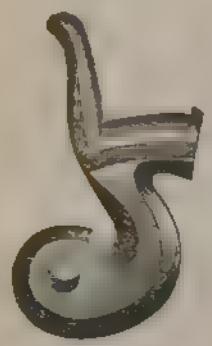
CLABROUGH, 1⅜ in
Beveled Edge, Polished and Engraved

	Per Doz.
No. 4R—Right Hd.	$14 00
No. 4L—Left Hd.	14 00



FLAT BODY, 1½ in.
Beveled, Filed

	Per Doz.
No. 5R—Right Hand.	$8.40
No. 5L—Left Hand	8.40

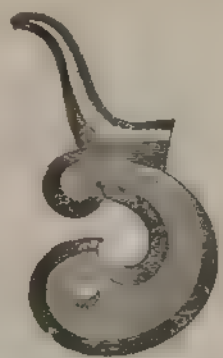


FLAT BODY, 1⅛ in
Beveled Edge, Filed

	Per Doz
No. 6R—Right Hand	$8 00
No. 6L—Left Hand	8 00

ENGLISH CIRCULAR
1⅛ in., Concave Edge
Polished and Engraved

	Per Doz
No. 7R—Right Hd.	$15 00
No. 7L—Left Hd.	15 00



FOR MACHINE MADE GUNS, 1⅛ in
Beveled Edge, Filed

	Per Doz
No. 8R—Right Hd.	$10 00
No. 8L—Left Hd.	10 00

FOR MACHINE MADE AND PIEPER GUNS
1⅛ in. Concave, Filed

	Per Doz
No. 9R—Right Hd.	$11 00
No. 9L—Left Hd.	11 00

BELGIAN, 1⅛ in.
Beveled, Filed

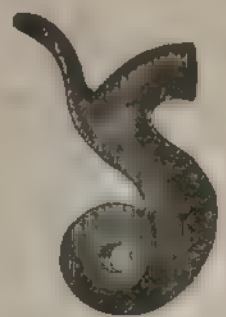
	Per Doz
No. 10R—Right Hd.	$10 00
No. 10L—Left Hd.	10 00

ROUND BODY, 1½ in.; Filed

	Per Doz
No. 11R—Right Hand.	$9 60
No. 11L—Left Hand.	9.60

PIEPER DIANA
New Model Hammer, Filed

	Per Doz
No. 12R—Right Hand.	$20 00
No. 12L—Left Hand.	20 00



PIEPER, BACK ACTION
1⅛ in., Filed

	Per Doz
No. 13R—Right Hand.	$11 00
No. 13L—Left Hand.	14 00

MUZZLE LOADING
1⅛ in., Filed

	Per Doz.
No. 14R—Right Hand.	$4 00
No. 14L—Left Hand.	4 00

The Material shown on this page is not finished and must be fitted by a gunsmith.

GUN MATERIAL

BREECH LOADING GUN LOCKS

BACK ACTION, REBOUNDING — Per Pair

No. 15—Half Finished, Filed Plate, Two Springs, With Circular Hammers — $5 00

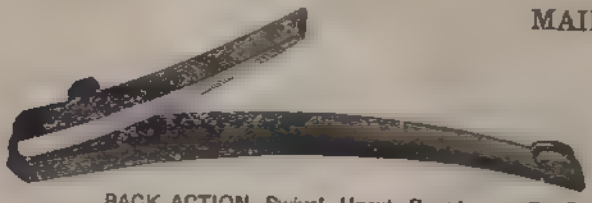
No. 16—Fine Filed, Steel Inside, Two Springs, Without Hammers, Rebounding — 10 00

BAR ACTION, REBOUNDING — Per Pair

No. 17—Rough Filed Plates, Low Axle, With Hammers — $7 00

No. 18—Fine Filed Plates, Low Axle, Steel Insides, Three Pin Bridle, Leg Over Sear, Without Hammers — 16 00

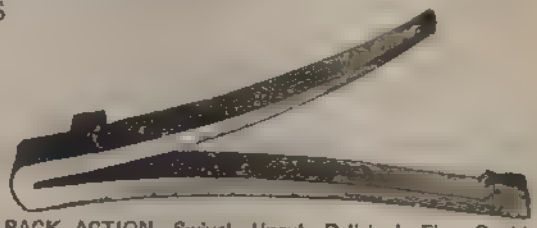
MAINSPRINGS



BACK ACTION, Swivel, Uncut, Bright — Per Dozen

No. 19R—Right Hand — $6 00

No. 19L—Left Hand — 6 00



BACK ACTION, Swivel, Uncut, Polished, Fine Quality — Per Dozen

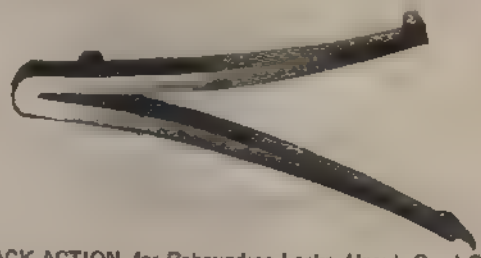
No. 20R—Right Hand — $6 00

No. 20L—Left Hand — 6 00

BAR ACTION, Swivel, Cut, Polished, Extra Quality — Per Dozen

No. 21R—Right Hand — $6 00

No. 21L—Left Hand — 6 00



BACK ACTION, for Rebounding Locks, Uncut, Good Quality — Per Dozen

No. 22R—Right Hand — $7 00

No. 22L—Left Hand — 7 00

BACK ACTION, for Rebounding Locks, Cut, Fine Quality — Per Dozen

No. 23R—Right Hand — $9.40

No. 23L—Left Hand — 9.40

BAR ACTION, for Rebounding Locks, Cut, Fine Quality Small, for Guns with Low Hammers — Per Dozen

No. 24R—Right Hand — $9 40

No. 24L—Left Hand — 9 40

TUMBLERS

BAR OR FRONT ACTION
Swivel, Filed, Steel

Per Doz.

No. 25R—Right Hand — $5 40

No. 25L—Left Hand — 5 40

BACK ACTION
Swivel, Filed, Iron

Per Doz.

No. 26R—Right Hand — $4 00

No. 26L—Left Hand — 4 00

TUMBLERS

BACK OR BAR ACTION
Rebounding, Swivel, Filed, Iron

Per Doz.

No. 27R Right Hand — $7 00

No. 27L Left Hand — 7 00

BACK ACTION
Rebounding, Swivel, Filed, Iron

Per Doz.

No. 28R Right Hand — $7 00

No. 28L Left Hand — 7 00

SEAR SPRINGS

BACK ACTION
Double, Polished, Fine Quality

Per Doz.

No. 29R Right Hand — $3 00

No. 29L Left Hand — 3 00

BAR OR FRONT ACTION
Polished

Per Doz.

No. 30R Right Hand — $2 40

No. 30L Left Hand — 2 40

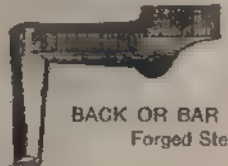
SEARS

BACK OR BAR ACTION
German, Filed, Iron

Per Doz.

No. 31R—Right Hand — $2 40

No. 31L—Left Hand — 2 40



BACK OR BAR ACTION
Forged Steel

Per Doz.

No. 32R—Right Hand — $2 00

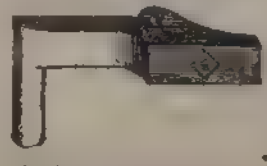
No. 32L—Left Hand — 2 00

Filed Iron

No. 33R—Right Hand — 2 40

No. 33L Left Hand — 2 40

SEARS



BACK OR BAR ACTION
Filed, Steel, Freed

Per Doz.

No. 34R—Right Hand — $3 00

No. 34L Left Hand — 3 00

The Material Shown on this Page is Not Finished and must be Fitted by a Gunsmith

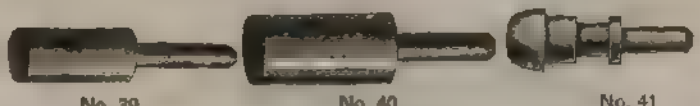
GUN MATERIAL

PLUNGER SEATS AND PLUNGERS

No. 35 No. 36 No. 37 No. 38

	Per Dozen
No. 35—Plunger Seat	$2 00
No. 36—Plunger	.80
No. 37—Nitro Plunger Seat, Bushed	1 10
No. 38—Nitro Plunger, Bushed Center	1.00

PLUNGERS



No. 39 No. 40 No. 41

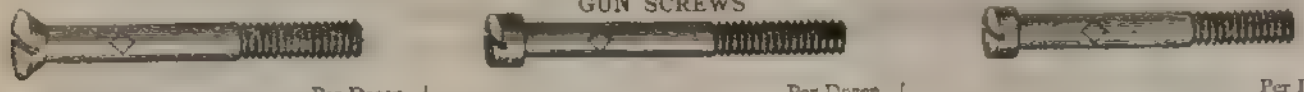
	Per Dozen
No. 39—Large Head Plunger, ¼ in. Diam.	$2.00
No. 40—Large Head Plunger, ⅜ in. Diam.	2 00
No. 41—Rd. Hd. Plgr., High Cut for Screw	3.00

NIPPLES FOR MUZZLE LOADING GUNS

Assorted Sizes

No. 42—English Tapered Two Sided	Per Doz. $1 00	No. 43—English Tapered, Two Sided	Per Doz. $1.60	No. 44—English Tapered, Two Sided	Per Doz. $1 60	No. 45—Springfield Thread, Musket Top, Four Sided	Per Doz. $1 25	No. 46—Springfield Thread, Solid, or Sporting Top, Four Sided	Per Doz. $1 60

GUN SCREWS



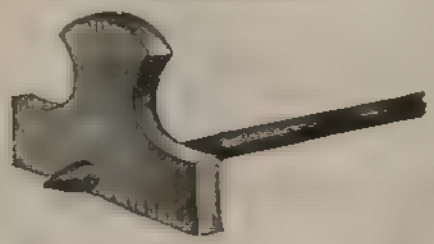
	Per Dozen
No. 47—Side Pin, for Single Gun, Threaded	$0 40
No. 48—Side Pin, for Double Gun, Threaded	$0.40
No. 49—Cross Pin, for Double Gun, Threaded	$0 40

TOP LEVERS

	Per Dozen
No. 50—Forged, Scott Action	$ 6 00
No. 51—Finished, Scott Action	15 00

	Per Dozen
No. 55—Forged, Regular Action	$ 6 00
No. 56—Filed, Regular Action	12.00

EXTRACTORS



	Per Dozen
No. 61—Milled, C. F. Extractor	$10 00

FORE-END SNAPS

	Per Dozen
No. 62—Deeley and Edge, Fore-end Snap, Regular	$18 00

	Per Dozen
No. 65—Bonehill, Fore-end Snap	$12.00

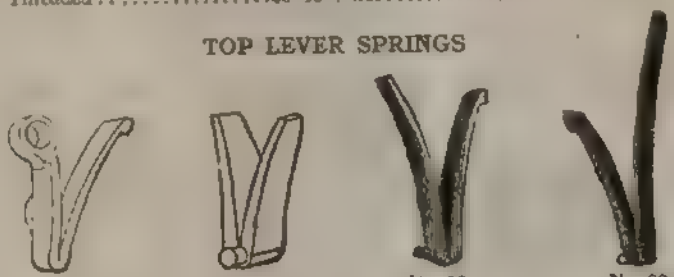
LOCK SCREWS

	Per Doz.
No. 52—Inside Lock Screw, Threaded	$0 40

TUMBLER PINS

	Per Doz.
No. 53—Tumbler Pin	$0 40
No. 54—Tumbler Pin, for Musket	1 00

TOP LEVER SPRINGS



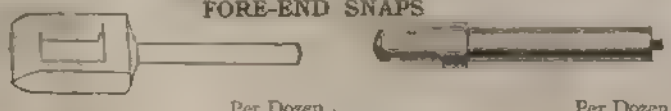
No. 57 No. 58 No. 59 No. 60

	Per Dozen
No. 57—English	$8 00
No. 58—For Belgian Guns	6 00
No. 59—Scott New Style	8 00
No. 60—Tolley	8 00

BARREL LOOPS

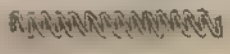
	Per Dozen
No. 63—Malleable Iron	$1 20
No. 64—Steel	8 00

FORE-END SNAPS



	Per Dozen
No. 66—Belgian	$3.00
No. 67—Belgian	$4 00

SNAP SPRINGS



	Per Dozen
No. 68—Fore-end Snap Springs	$2 00

The Material Shown on This Page is Not Finished, and must be Fitted by a Gunsmith

GUN MATERIAL

SHOT GUN TRIGGER GUARDS

	Per Dozen
No. 70—Double Gun Guards, to Screw Off, Filed	$10.00
No. 71—Double Gun Guards, to Screw Off, Blued and Engraved	12.00

FORE-END IRONS, BELGIAN

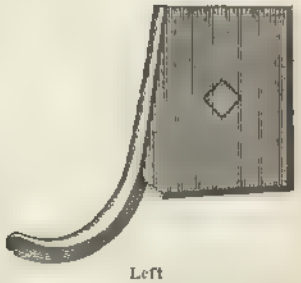
	Per Dozen
No. 72—Forged Iron, Milled	$12 00

BUTT PLATES

	Per Dozen
No. 73—Hard Rubber Butt Plates, Assorted Designs	$18 00

DOUBLE TRIGGERS

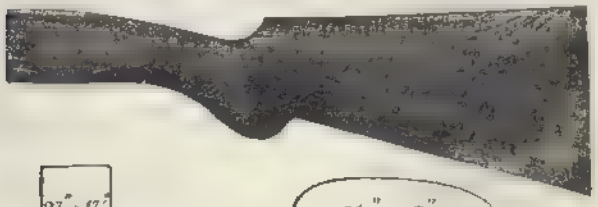
Right

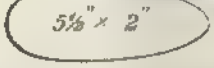


Left

	Per Dozen
No. 74R—Malleable Iron, Right Hand	$1.50
No. 75L—Malleable Iron, Left Hand	1.50
No. 75R—Filed, Right Hand	3.00
No. 75L—Filed, Left Hand	3.00

TURNED SHOT GUN STOCKS

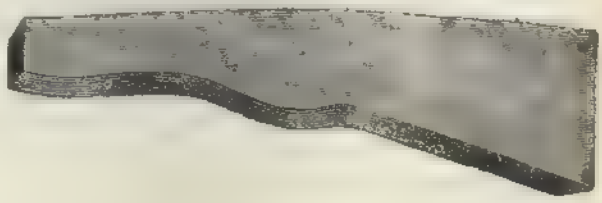




Made from Selected Black Walnut, Turned to a Pattern Designed to Re-Stock any American, English or Belgian Breech Loading Shot Gun. Turned to a very close finish that will permit any Length or Drop of Stock required

	Each
No. 100—Domestic Walnut	$2 40
No. 101—Fine Quality, Domestic Walnut	2 80
No. 102—Finest Quality Curled, Domestic Walnut	5 20
No. 103—English Walnut	2 60
No. 104—Fine Quality, English Walnut	4 00
No. 105—Finest Quality, English Walnut	7 20

SAWED SHOT GUN STOCKS



Made from Selected Black Walnut, Thoroughly Seasoned

	Each
No. 106—English Walnut	$5 20
No. 107—Fine Quality, English Walnut	9 20
No. 108—Finest Quality, English Walnut	10 60

APPROXIMATE PRICES FOR GUN REPAIRS

These Prices are approximate. We cannot state the exact amount without seeing the job
Checkering, Engraving and Fancy Work add largely to the expense

	Net Each
Barrels—Browning or Blueing Barrels	$5 00 to 8 00
Barrels—Choke Boring Barrels	1 50 to 3 00
Barrels—Cutting off Barrels	1 00 to 2 00
Barrels—Cylinder Boring	.75
Barrels—Straightening Barrels	2 00 to 6 00
Barrels—Taking Barrels Apart and Resoldering	3 00 to 5.00
Barrels—Taking Dents out of Barrels	2 00 to 5 00
Butt-Plates—Rubber	75 to 2 00
Silver Recoil Pads—Fitted	5 00
Extractors	1 50 to 3 00
Flobert Rifle Breech-Blocks	.75 to 1 50
Flobert Rifle Hammers	.75 to 1 50
	Snap D. & E.
Forearms—For Guns $10.00 and less	4 00 to 7.00
Forearms—For Guns $20.00 and less	5.00 to 8.00
Hammers—Matching Hammers, plain, flat	1.00 to 2 00
Hammers—Matching Hammers, round body, according to finish, engraving, etc	1.00 to 3.00
Levers—Top or Side	1.00 to 4 00
Locks—Fitting new Locks for B. L. Guns	2.50 to 5 00

	Net Each
Plungers	$0 25 to .75
Sears	25 to 1 00
Sights—Double Ivory, fitted	1 00
Soldering Loops	50
Springs—Main	.75 to 1 50
Springs—Lever	.50 to 1 00
Springs—Sear	50 to 1 00
Stocks—Bending	2 00 to 5 00
Stocks—Checking Stocks	1 50 to 10 00
Stocks—Cutting off	1 00 to 2 00
Stocks—New for Guns up to $10.00	6 00 to 7 50
Stocks—New for Guns up to $20.00	7 50 to 10.00
Stocks—New for Hammerless and Fine Guns	7 50 to 50 00
Stocks—Refinishing Stocks	2 00 to 4.00
Swivels	50
Triggers—Per Pair	.50 to 2 00
Trigger-Guards	1.00 to 2 00
Trigger-Plates	2.00 to 4 00
Tumblers	.50 to 2.00
Tumbler Pins	.05 to .25

LOADED SHELLS

LEAGUE

Extra Quality Black Powder

Manila Color Shell, Plain Brass Head; No. 2 Primer; One Card and Two Elastic Felt Wads over Powder, One Card Wad over Best Drop Shot.

10 Gauge, Drop Shot, Length 2⅞ in.

Nos.	Drams Powder	Ounces Shot	Size Shot	Per 1000
B36	4¼	1⅛	6	$43.75
B35	4¼	1⅛	5	43.75
B34	4¼	1⅛	4	43.75
B33	4¼	1⅛	3	43.75
B32	4¼	1⅛	2	43.75

12 Gauge, Drop Shot, Length 2⅝ in.

778	3⅛	1⅛	8	40 00
777	3⅛	1⅛	7	40 00
776	3⅛	1⅛	6	40.00
775	3⅛	1⅛	5	40.00
774	3⅛	1⅛	4	40.00
773	3⅛	1⅛	3	40.00
772	3⅛	1⅛	2	40.00

16 Gauge, Drop Shot, Length 2⅝ in.

957	3	1	7	39.25
956	3	1	6	39.25
955	3	1	5	39.25
954	3	1	4	39.25

20 Gauge, Drop Shot, Length 2½ in.

627	2¼	⅞	7	36.25
626	2¼	⅞	6	36.25
625	2¼	⅞	5	36 25
624	2¼	⅞	4	36.25

EQUIVALENT STRENGTH

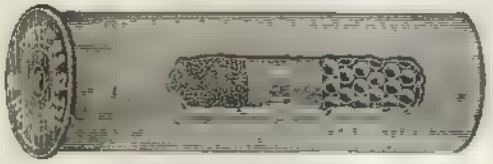
—of—

BLACK, SEMI-SMOKELESS AND SMOKELESS POWDERS

Black Powder Drams	King's Semi-Smokeless Drams	Bulk Smokeless Drams	Dense Smokeless Ballistite Grains
2⅛	2	2	16
2⅛	2¼	2¼	18
2¾	2½	2½	20
3	2¾	2¾	22
3¼	3	3	24
3½	3¼	3¼	26
3¾	3½	3½	28
4	3¾	3¾	30
4¼	4	4	32
4½	4¼	4¼	34

Packing

All Loaded Shells, 25 in a Box, and 500 in a Case; Weight 60 Lbs. for 12 Gauge



REFEREE

King's Semi-Smokeless Powder

Purple Color Shell, Plain Brass Head; No. 2 Primer; One Card and Two Elastic Felt Wads over Powder One Card Wad over Best Drop Shot.

10 Gauge, Drop Shot, Length 2⅞ in.

Nos.	Drams Powder	Ounces Shot	Size Shot	Per 1000
B48	3¾	1⅛	8	$43 00
B47	3¾	1⅛	7	43 00
B46	3¾	1⅛	6	43.00
B45	3¾	1⅛	5	43.00
B44	3¾	1⅛	4	43.00
B43	3¾	1⅛	3	43 00
B42	3¾	1⅛	2	43.00
B41	3¾	1⅛	1	43.00
B4BB	3¾	1⅛	BB	46.00
X257	4⅛	1¼	4 Buck	49.00

12 Gauge, Drop Shot, Length 2⅝ in.

A50	3	1⅛	10	38.50
A59	3	1⅛	9	38.50
A58	3	1⅛	8	38.50
A57	3	1⅛	7	38.50
A56	3	1⅛	6	38.50
A55	3	1⅛	5	38 50
A54	3	1⅛	4	38.50
A53	3	1⅛	3	38 50
A78	3¼	1⅛	8	39 25
A77	3¼	1⅛	7	39 25
A76	3¼	1⅛	6	39.25
A75	3¼	1⅛	5	39 25
A74	3¼	1⅛	4	39 25
A73	3¼	1⅛	3	39.25
A72	3¼	1⅛	2	39 25
A71	3¼	1⅛	1	39 25
A7BB	3¼	1⅛	BB	42 25
X242	3½	1	4 Buck	41.50

12 Gauge, Chilled Shot, Length 2⅝ in.

AA6C	3½	1	6 Ch	43 00
AA5C	3½	1	5 Ch	43.00
AA4C	3½	1	4 Ch	43 00
AA3C	3½	1	3 Ch	43.00
AA2C	3½	1	2 Ch	43.00
AA1C	3½	1	1 Ch	43 00
AABB	3½	1	BB	46.00
Single Ball	3¼	1	Ball	45.25

16 Gauge, Drop Shot, Length 2⅝ in.

C37	2⅛	1	7	37 75
C35	2⅛	1	5	37.75
C5BB	2⅛	1	BB	40.75
C58	2¾	⅞	8	37 00
C57	2¾	⅞	7	37.00
C56	2¾	⅞	6	37 00
C55	2¾	⅞	5	37.00
C54	2¾	⅞	4	37 00
C53	2¾	⅞	3	37 00
C52	2¾	⅞	2	37 00
C5BB	2¾	⅞	BB	41.50
Single Ball	2¾	⅞	Ball	44.50

20 Gauge, Drop Shot, Length 2½ in.

C228	2¼	¾	8	36 25
C227	2¼	¾	7	36.25
C226	2¼	¾	6	36 25
C225	2¼	¾	5	36 25
C224	2¼	¾	4	36.25
Single Ball	2½	¾	Ball	43.75

28 Gauge, Drop Shot, Length 1⅝ in.

C278	1¾	⅝	8	33 50
C277	1¾	⅝	7	33 50
C276	1¾	⅝	6	33.50
C275	1¾	⅝	5	33.50
C274	1¾	⅝	4	33.50

WAKEFIELD INTERCHANGEABLE FIXTURES

Square Stems for Electric, Gas or Combination

The Wakefield Square Fixtures are designed primarily to harmonize with the modern ideas of furniture construction. They are very artistic and neatly designed giving to a room a rich, pleasing effect when used in conjunction with the Mission style furniture which is at present so much in vogue. They are suitable for Libraries, Dining Rooms and Parlors and are especially suitable for Public Libraries, Court Rooms and Municipal Buildings where rich ornamental decorations are used in harmony with plain conservative designs.

The Square Fixtures are made of heavy substantial material, so that a beautiful finish may be produced on them without leaving a thin, weak shell. They are interchangeable so that one can use from one to four lights on them in addition to a drop light which may be attached to the bottom of the Body. If desirable these Fixtures may be inverted and used as a Single Light.

The Stem may be Lengthened or Shortened to suit the demands of the particular case. All that is necessary is to change the length of the tube to suit the fancy. The 36-inch Stems are suitable for the ordinary eight or nine foot ceiling without change.

Nos. 612, 412 and 812

Regular Length Over-all 36 in.; Square Canopy, 4½x4½x4½ in.; Square Tubular Stem, ¾x¾ in.; Square Body 4½x4½x9 in.

ELECTRIC

	Each
No. 612-BB—Brushed Brass Finish	$4.50
No. 612-OC—Oxidized Copper Finish	4.50

GAS

	Each
No. 412-BB—Brushed Brass Finish	$4.75
No. 412-OC—Oxidized Copper Finish	4.75

COMBINATION

	Each
No. 812-BB—Brushed Brass Finish	$4.75
No. 812-OC—Oxidized Copper Finish	4.75

Weight 4 Lbs. Each

Nos. 613, 413 and 813

Regular Length Over-all 36 in.; Square Canopy, 4½x4½x4½ in.; Square Tubular Stem, ¾x¾ in.; Square Body 4½x4½x12 in.

ELECTRIC

	Each
No. 613-BB—Brushed Brass Finish	$5.00
No. 613-OC—Oxidized Copper Finish	5.00

GAS

	Each
No. 413-BB—Brushed Brass Finish	$5.25
No. 413-OC—Oxidized Copper Finish	5.25

COMBINATION

	Each
No. 813-BB—Brushed Brass Finish	$5.25
No. 813-OC—Oxidized Copper Finish	5.25

Weight 4 Lbs. Each

Nos. 614, 414 and 814

Regular Length Over-all 36 in.; Square Canopy, 4½x4½x4½ in.; Square Tubular Stem ¾x¾ in.; Square Body 4½x4½x12 in.

ELECTRIC

	Each
No. 614-BB—Brushed Brass Finish	$6.00
No. 614-OC—Oxidized Copper Finish	6.00

GAS

	Each
No. 414-BB—Brushed Brass Finish	$6.25
No. 414-OC—Oxidized Copper Finish	6.25

COMBINATION

	Each
No. 814-BB—Brushed Brass Finish	$6.25
No. 814-OC—Oxidized Copper Finish	6.25

Weight 4½ Lbs. Each

The above Stems take Square Arms Nos. 224, 225 or 226 for the Electric shown on page 379; For the Gas Stems, Square Arm No. 25, and for the Combination Stem, Square Arm No. 1425, both shown on page 380

Dead Black and Nickel Finishes are not Carried in Stock, but can be Furnished on Special Order from the Factory at same prices as Brushed Brass

Stems and Canopies are packed in a special wrapping of paper and excelsior which prevents marring or scratching during shipment

WAKEFIELD INTERCHANGEABLE FIXTURES

Square Chain Stems, for Electric Lights Only

The Wakefield Interchangeable Chain Fixtures have the same pecuniary advantages that the rigid fixtures have. The parts are interchangeable and the same changes can be made with the chain as with the regular fixtures, except that they are adapted to Electricity only and cannot be used for Gas. The Regular Length of these Stems is 24 inches but they may be lengthened or shortened by adding or dropping links from the chain which are constructed so as to be detachable.

The Chain Fixtures are espacially adapted to the use of Tungsten Lamps. The peculiar construction of the chain gives the Stem a springy effect which counteracts any jarring which in the ordinary stem would cause weakly constructed filaments to break. One, Two, Four or Five Arms may be attached to Body and a drop light or Pendant Switch may be attached through the hollow nut in the bottom of Body

No. 712

Regular Length Over-all, 24 in.; Square Canopy, 4½x4½x4½ in.; ½ in. Flat Chain; Square Body, 4x4x9 in.

	Each
No. 712-BB—Brushed Brass Finish	$5.00
No. 712-OC—Oxidized Copper Finish	5.00

Weight 2¾ Lbs. Each

No. 713

Regular Length Over-all, 24 in.; Square Canopy, 4x4x4 in.; ½ in. Flat Chain; Square Body, 4x4x11 in.

	Each
No. 713-BB—Brushed Brass Finish	$5.50
No. 713-OC—Oxidized Copper Finish	5.50

Weight 2¾ Lbs. Each

No. 714

Regular Length Over-all, 24 in.; Square Canopy, 4½x4½x4½ in.; ½ in. Flat Chain; Square Body, 4½x4½x12 in.

	Each
No. 714-BB—Brushed Brass Finish	$6.50
No. 714-OC—Oxidized Copper Finish	6.50

Weight 3¾ Lbs. Each

The above Stems take Arms Nos. 224, 225 or 226, shown on page 379

Above Stems can be used with 2, 3, 4 or 5 lights, including bottom lights, and with or without pendant switch

Dead Black and Nickel Finishes are not Carried in Stock, but can be Furnished on Special Order from the Factory at same prices as Brushed Brass

Stems and Canopies are packed in a special wrapping of paper and excelsior which prevents marring or scratching during shipment

WAKEFIELD INTERCHANGEABLE FIXTURES

Round Stems for Electric, Gas or Combination

The Round Fixtures are made of Heavy Brass Tubing and are Handsomely Finished in the most popular styles. The different parts are interchangeable and the body is fitted with the cartwheel shaped casting which permits the use of from one to five electric light arms besides an additional drop light or pendant switch which may be attached to the bottom of the body; it is also possible to make a Combination Electric and Gas Chandelier from them with three arms for each besides the drop Electric Light or pendant switch. If desirable, they can be used for Gas Only. The regular length over-all is 36 inches, but they may be Lengthened or Shortened to suit the taste, and innumerable combinations may be designed from the interchangeable parts.

Nos. 600, 400 and 800

Nos. 603, 403 and 803

Nos. 604, 404 and 804

Nos. 609, 409 and 809

ROUND STEMS

Regular Length Over-all, 36 In.; Round Canopy, 4x4 In.; Round Tubular Stem, ⅞ In. Diameter; Round Body 3¼ In. Diameter, 8 In. Deep.

BRUSHED BRASS FINISH

Nos.	600-BB	400-BB	800-BB
For Lights, Kind	Electric	Gas	Combination
Each	$3.25	3.25	3.50

OXIDIZED COPPER FINISH

Nos.	600-OC	400-OC	800-OC
For Lights, Kind	Electric	Gas	Combination
Each	$3.25	3.25	3.50

Weight 3⅜ Lbs. Each

Regular Length Over-all, 36 In.; Round Canopy, 4x4 In.; Round Tubular Stem, ⅞ In. Diameter; Round Body, 3¼ In. Diameter, 11 In. Deep.

BRUSHED BRASS FINISH

Nos.	603-BB	403-BB	803-BB
For Lights, Kind	Electric	Gas	Combination
Each	$4.00	4.00	4.25

OXIDIZED COPPER FINISH

Nos.	603-OC	403-OC	803-OC
For Lights, Kind	Electric	Gas	Combination
Each	$4.00	4.00	4.25

Weight 3¾ Lbs. Each

Regular Length Over-all, 36 In.; Round Canopy, 4x4 In.; Round Tubular Stem, ⅞ In. Diameter; Round Body 6 In. Diameter, 14 In. Deep.

BRUSHED BRASS FINISH

Nos.	604-BB	404-BB	804-BB
For Lights, Kind	Electric	Gas	Combination
Each	$6 50	6.50	6.75

OXIDIZED COPPER FINISH

Nos.	604-OC	404-OC	804-OC
For Lights, Kind	Electric	Gas	Combination
Each	$6.50	6.50	6.75

Weight 4¾ Lbs. Each

Regular Length Over-all, 36 In.; Round Canopy, 4x4 In.; Round Tubular Stem, ⅞ In. Diameter; Round Body 8 In. Diameter, 10 In. Deep.

BRUSHED BRASS FINISH

Nos.	609-BB	409-BB	809-BB
For Lights, Kind	Electric	Gas	Combination
Each	$6 25	6.25	6.50

OXIDIZED COPPER FINISH

Nos.	609-OC	409-OC	809-OC
For Lights, Kind	Electric	Gas	Combination
Each	$6.25	6.25	6.50

Weight 4½ Lbs. Each

The above Stems take all Round Arms shown on pages 379 and 380

Dead Black and Nickel Finishes are not Carried in Stock, but can be Furnished on Special Order from the Factory at same prices as Brushed Brass

Stems and Canopies are packed in a special wrapping of paper and excelsior which prevents marring or scratching during shipment

WAKEFIELD INTERCHANGEABLE FIXTURES

Round Chain Stems, for Electric Lights Only

The Round Chain Fixtures have the same general features as the Round Regular Stems except they are for Electric Lights only, and cannot be used for Gas. It is possible to fit up these fixtures with One, Two, Three, Four or Five Arm Lights, and in addition a Drop Light may be attached to the hollow nut on the bottom of the Body, or a Pendant Switch may pass through it. The Regular Length is 24 inches over-all, but the Detachable Chain Link Feature permits the chain to be Lengthened or Shortened to suit the individual requirements. All the Electric Arms that are suitable for the Regular Stems can be fitted to the chain, and the same handsome finishes produced on the Regular Stems are true of the chain.

Chain Fixtures are most suitable for Hallways, Verandas, Libraries, Dining Rooms and Parlors and especially so when an individual Drop Light is required. They are adapted for use with Tungsten Lamps on account of the sping-like construction of the chain which acts as a cushion to counteract any jar which would be injurious to or would ruin the delicately constructed filament of a Tungsten.

No. 708

No. 700

No. 703

No. 704

No. 709

Regular Length Over-all, 24 in.; Round Canopy, 4x4 in.; ½ in. Flat Chain; Round Body, 2¾ in. Diameter, 8 in. Deep

No. 708-BB—Brushed Brass Finish	$3.25
No. 708-OC—Oxidized Copper Finish	3.25

Weight 4 Lbs. Each

Regular Length Over-all, 24 in.; Round Canopy, 4x4 in.; ½ in. Flat Chain; Round Body, 3¼ in. Diameter, 8 in. Deep

	Each
No. 700-BB—Brushed Brass Finish	$3.75
No. 700-OC—Oxidized Copper Finish	3.75

Weight 2¼ Lbs. Each

Regular Length Over-all, 24 in.; Round Canopy, 4x4 in.; ½ in. Flat Chain; Round Body, 3¼ in. Diameter, 11 in. Deep

No. 703-BB—Brushed Brass Finish	$4.50
No. 703-OC—Oxidized Copper Finish	4.50

Weight 3 Lbs. Each

Regular Length Over-all, 24 in.; Round Canopy, 4x4 in.; ¾ in. Flat Chain; Round Body, 6 in. Diameter, 14 in. Deep

	Each
No. 704-BB—Brushed Brass Finish	$6.75
No. 704-OC—Oxidized Copper Finish	6.75

Weight 4 Lbs. Each

Regular Length Over-all, 24 in.; Round Canopy, 4x4 in.; ¾ in. Flat Chain; Round Body, 6 in. Diameter, 12 in. Deep

No. 709-BB—Brushed Brass Finish	$6.50
No. 709-OC—Oxidized Copper Finish	6.50

On Nos. 704 and 709 Special Stems for 6 or 8 Arms will be supplied without extra charge when so ordered

The above Stems take any of the Round Arms shown on page 379

Dead Black and Nickel Finishes are not Carried in Stock, but can be Furnished on Special Order from the Factory at same prices as Brushed Brass

Stems and Canopies are packed in a special wrapping of paper and excelsior which prevents marring or scratching during shipment

WAKEFIELD INTERCHANGEABLE FIXTURES

Round Stems for Electric, Gas or Combination

All Parts of the Wakefield Universal Fixtures are interchangeable. Any conceivable combination of Arms and Stems is possible to be made from these separate parts without trouble. It can be done in the presence of the customer and is a great assistance in selling the goods.

No. 608—Electric

No. 806—Combination

No. 405—Gas

No. 406—Gas

ELECTRIC

The Electric Stem is fitted to hold from one to five arm Lights and in addition a drop light may be attached to the bottom of the Body or a Pendant Switch may be passed through the hollow nut.

Regular Length Over-all, 36 in.; Round Canopy, 4½x3 in.; Round Tubular Stem, ⅜ in. Diameter; Round Body, 2¾ in. Diameter, 8 in. Deep.

	Each
No. 608-BB—Brushed Brass Finish	$2.75
No. 608-OC—Oxidized Copper Finish	2.75

Weight 3⅛ Lbs. Each

COMBINATION GAS AND ELECTRIC

Combination Stems can be used for One Gas and One Electric; Two Gas and One Electric; Two Gas and Two Electric or Two Gas and Three Electric Lights.

Regular Length Over-all, 36 in.; Round Canopy, 4x4 in.; Round Tubular Stem, ⅜ in. Diameter; Round Body 4½ in. Diameter, 4½ in. Deep.

	Each
No. 806-BB—Brushed Brass Finish	$2.75
No. 806-OC—Oxidized Copper Finish	2.75

Weight 3 Lbs. Each

The Wakefield Universal Gas Light Fixtures are interchangeable and innumerable artistic effects can be produced by the many changes in the Arms. Two or Three Arms can be used with these Stems and an inverted light may be attached in addition to the Hollow nut on the bottom of the Body.

GAS

Regular Length Over-all, 36 in.; Round Canopy, 4x4 in.; Round Tubular Stem, ⅜ in. Diameter; Round Body, 2¾ in. Diameter, 8 in. Deep.

	Each
No. 405-BB—Brushed Brass Finish	$2.75
No. 405-OC—Oxidized Copper Finish	2.75

Weight 3 Lbs. Each

GAS

Regular Length Over-all, 36 in.; Round Canopy, 4x4 in.; Round Tubular Stem, ⅜ in. Diameter; Round Body, 2¼ in. Diameter, 8 in. Deep.

	Each
No. 406-BB—Brushed Brass Finish	$2.50
No. 406-OC—Oxidized Copper Finish	2.50

Weight 2⅞ Lbs. Each

The above Stems take any of the Round Arms shown on pages 379 and 380

Dead Black and Nickel Finishes are not Carried in Stock, but can be Furnished on Special Order from the Factory at same prices as Brushed Brass

Stems and Canopies are packed in a special wrapping of paper and excelsior which prevents marring or scratching during shipment

WAKEFIELD INTERCHANGEABLE FIXTURES

NEW COMMERICAL TYPE STEMS AND ARMS

For Electric Lights Only

These Fixtures are especially designed for use in Stores, Offices, Public Buildings, Halls, etc., and the low price enables the dealer to meet competition of low priced Fixtures of other makes, and at the same time give the customer the regular high standard of quality, both in workmanship and material which is always found in Wakefield Fixtures. In this new Fixture the same principle is applied as that of the Square Body Fixtures; that is the Arms are held in place by clamping between the upper and lower parts of the body. This method permits the use of a Cast Iron Body covered with a Band, both Band and Body being arranged with the regular 2, 3, and 4 Arm Outlets, with provision for Bottom Light on each Stem. The unused outlets are filled with a small inconspicuous cover which snaps securely into place. By using the new Terminal Couplings No. 1233, on the Arms of these Fixtures, it makes a very efficient fixture for use with the delicate Mazda Lamps.

ARMS

These Stems require the use of special Arms, either No. 238, 239 or 240 shown below.

⅝ in. Tubing; 9 in. Spread

	Each
No. 238-BB—Brushed Brass Finish	$0.75
No. 238-OC—Oxidized Copper Finish	.75

Weight 4 Oz. Each

⅝ in. Tubing; 9 in. Spread

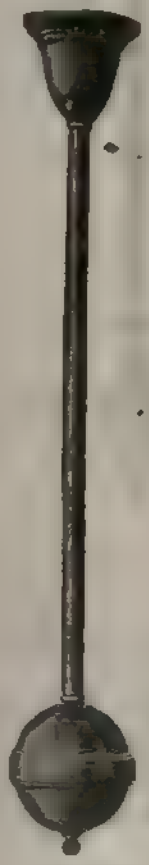
	Each
No. 239-BB—Brushed Brass Finish	$0.65
No. 239-OC—Oxidized Copper Finish	.65

Weight 3 Oz. Each

12 in. Spread

	Each
No. 240-BB—Brushed Brass Finish	$0.75
No. 240-OC—Oxidized Copper Finish	.75

Weight 4 Oz. Each



STEM No. 715

Regular Length Over-all 24 in.; Round Canopy 4½x4½ in.; ½ in. Flat Chain; Round Body, 5 in. Diameter
Electric Only

	Each
No. 715-BB—Brushed Brass Finish	$4.00
No. 715-OC—Oxidized Copper Finish	4.00

Weight 2⅝ Lbs. Each

STEM No. 615

Regular Length Over-all 36 in.; Round Canopy 4½x4½ in.; Round Tubular Stem, ⅞ in. Diameter; Round Body, 5 in. Diameter
Electric Only

	Each
No. 615-BB—Brushed Brass Finish	$3.50
No. 615-OC—Oxidized Copper Finish	3.50

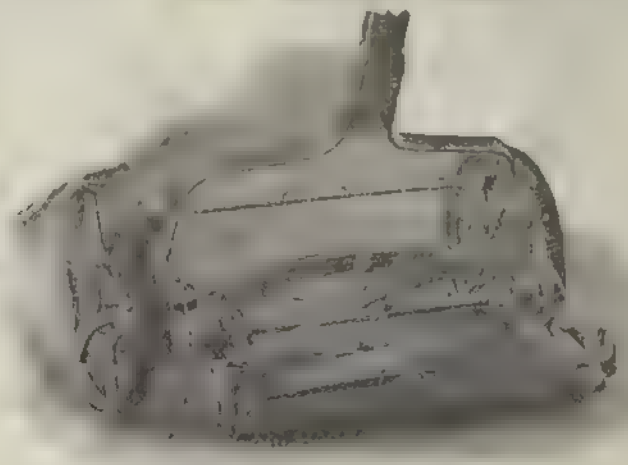
Weight 4¼ Lbs. Each

Dead Black and Nickel Finishes are not Carried in Stock, but can be Furnished on Special Order from the Factory at same prices as Brushed Brass

Stems and Canopies are packed in a special wrapping of paper and excelsior which prevents marring or scratching during shipment

ZENITH LAWN MOWERS

Satisfactory High Grade Mowers covering every requirement for Large or Small Lawns; Special Attention is given the quality of Materials and to the Workmanship; Nothing being left undone to produce Long Wearing, Easy Running Machines; All Mowers are carefully Assembled and Attractively Finished



Back View

ZENITH BALL BEARING

Triple Gear; Trussed Knife Bed

Special Features—Ball Bearing throughout, including Ball Bearing Driving Wheels and Ball Bearing Revolving Cutter; Five Crucible Steel Blades; Patent Adjustment for Center of Knife as well as at each end (not on any other Mower made), Stationary Knife Bar is mounted on Steel Cones, a Triple Train of Gears insures an easier and smoother running Mower and a more uniform cut, Drives from both Ends, Special Grass Catcher Attachment; 10 in. Drive Wheels, ⅝ in. Shafts and Frame Bars, Nicely Finished Oak Handle and Roller; Aluminum Finish, Trimmed in Gold and Carmine.

Width of Cut, In.	16	18	20
Weight, Each, Lbs	64	67	70
Each	$17 00	18 00	19 00

14 in. Zenith Mowers Can Be Furnished on Special Orders Only at $16.00 List Each.

Marswells Professional, Ball Bearing Adjustable

Four Blade Revolving Cutter

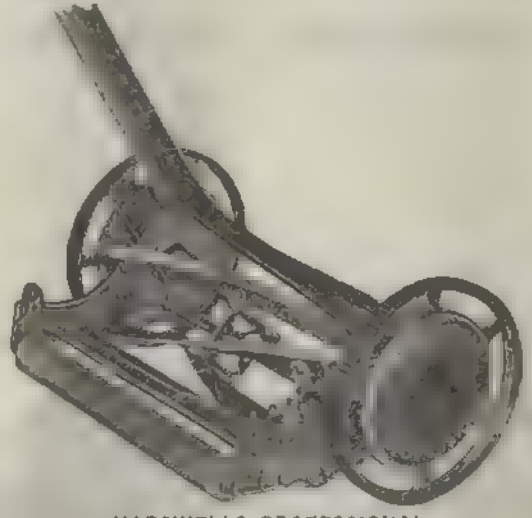
Silent in Operation

Adjustable Throughout

Handsomely Finished

Extra Long and Strong Handle

Especially Adapted for Terrace Work



Easy to Operate

Easy to Adjust

Easy to Keep in Order

Requires Very Little Attention

Simply Use Good Oil

It is Self Sharpening

No Tools Required to Adjust the Blades

MARSWELLS PROFESSIONAL

The Construction of the **Marswells Professional** is extremely Simple and Durable. An Important Feature is the **Blade Adjustment**, which is made with the Thumb and Finger without the use of any tools; this Adjustment is so simple and so nicely arranged that it **can be regulated by anybody**, regardless of whether they have any mechanical knowledge or not, this makes it especially desirable, as the ordinary Mower usually requires the attention of an expert for this purpose. **The Cutting Blades** are Extra Heavy, the Revolving Blades are made of Tough Crucible Steel. The Bottom Cutting Blade is made of Spring Saw Steel, the Blades are the vital part of any mower and especial care and attention have been given to this part of the Marswells; they have the necessary Strength and are so perfectly Tempered that they will stand the roughest usage and give almost unlimited Service. The Shaft is Solid Steel, which also adds to the durability of this part of the Mower. We also call especial attention to the **Large, Substantial Wheels**, 10 inches in Diameter; the **Ball Bearings** are made with special care and will never wear nor require adjusting, the **Cones** and **Cups** are made of Solid Cone Steel, no pressed Cups are used in its construction, another Important Part, which has given more or less trouble in ordinary Mowers, is the Handle; we use a Handle that is **twice as Strong and six inches longer than the regular kind.**

Solid Drive Wheels, 10 in. Diameter; Revolving Cutter, 6 in. Diameter; Width of Blades 1¼ in.; Stationary Knife Bar, pivoted on Steel Cones; Beautifully Finished in Gold and Red.

Width of Cut, In.	14	16	18	20
Weight Each, Lbs.	60	64	67	70
Each	$13.00	14.00	15.00	16.00

Note—A Resale Price Tag is attached to each Mower stating the Important Features of the Machine and giving good Selling Points.

LAWN MOWERS

Country Club Ball Bearing

Ten Inch Open Drive Wheels
Four Crucible Steel Blades on Six Inch Reel
Guaranteed Ball Bearings
Set Screw Adjustments
Knife Bed Pivoted on Steel Cones

Frame held by ⅝ in. Solid Steel Shaft
Cone Steel Cones and Cups
Saw Steel Bottom Cutting Blade
Silent in Operation
Attractively Finished in Green and Gold

COUNTRY CLUB

With High Wheels, Open Design, Large Reel and Green and Gold Trimming, the Country Club is a very Attractive Mower. At the price we ask for it this Mower is a Sure Winner.

Width of Cut, In.	14	16	18	20
Weight Each, Lbs.	50	52	55	58
Each	$9.00	10.00	11.00	12.00

NORTHERN KING, BALL BEARING

Nine and One-Half Inch Drive Wheels
Four Crucible Steel Cutter Blade
Guaranteed Ball Bearings
Set Screw Adjustments
Knife Bed Pivoted on Steel Cones
Frame Shaft ⅝ In. Solid Steel
Saw Steel Bottom Blade

RECENT IMPROVEMENTS.
Set Screw Adjustment for Cutting Bed in Place of Old Bolt and Nut Adjustment
Knife Bed Pivoted on Steel Cones
Wider Wheel Base to make Mower More Even Running
New Finish—Gold and Red

NORTHERN KING; BALL BEARING

The extra long Wheel Base on this Mower prevents both the Driving Wheel and the Roller from getting into small bottoms or ruts and therefore will cut much smoother than a short base Machine.

The Bearings are very fine, the Ball Bearings in the Cutting Blades will never wear out or need adjustment under ordinary use; Cutting Blades are all of fine Crucible Steel. Stationary Blade is made of High Carbon Saw Steel and has the easy screw adjustment. This Mower is exceedingly well balanced and we will guarantee that no other Mower of similar model will cut easier than the Northern King.

Width of Cut, In.	14	16	18	20
Weight Each, Lbs.	47	49	51	53
Each	$7.80	8.50	9.20	9.90

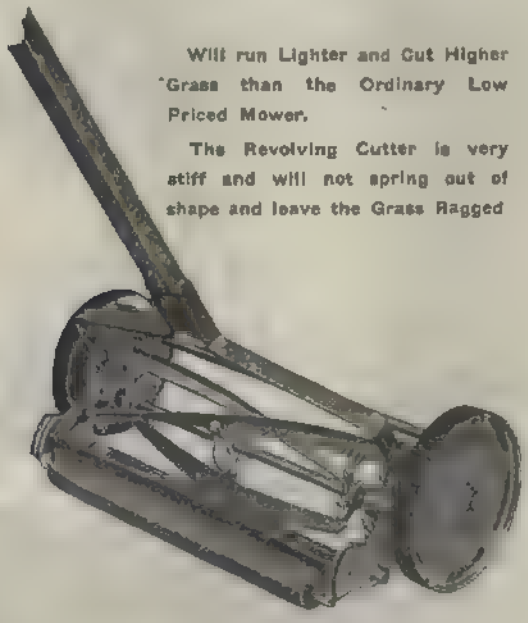
LAWN MOWERS

BOULEVARD

A Good Competitive Ball Bearing Mower; Four Crucible Steel Cutting Blades; Bottom Cutting Blade made of Highly Tempered Saw Steel; Heavy ⅝ in. Cutter Shaft.

Width of Cut, In.	14	16	18
Weight Each, Lbs.	60	64	67
Each	$5.25	5.50	5.75

One in a Box



Will run Lighter and Cut Higher Grass than the Ordinary Low Priced Mower.

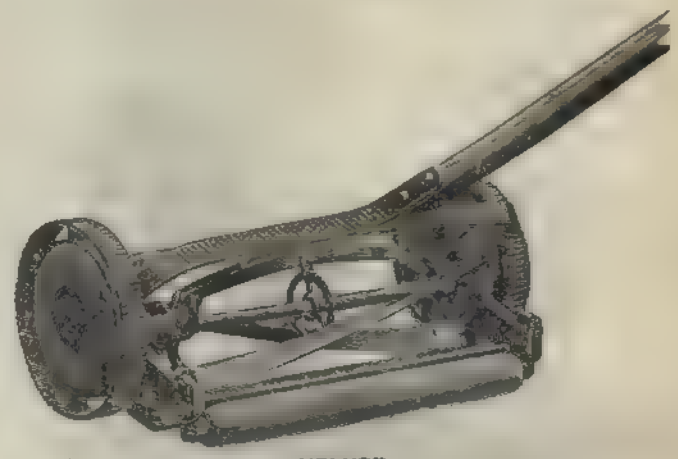
The Revolving Cutter is very stiff and will not spring out of shape and leave the Grass Ragged

SUPERIOR

Equipped with Large Phosphor Bronze Bearings, Heavy ⅝ in Diam Revolving Cutter Shaft, Special Gauge at each end of Cutter Shaft keep the Bearings Packed Long with Horse Hair Strings Dirt, etc The Bottom Cutting Blade is highly Tempered Saw Steel and is easily adjusted by Screws

Width of Cut, In.	14	16	18
Weight, Each, Lbs.	60	64	67
Each	$3.50	3 75	4 00

One in a Box



VELVET

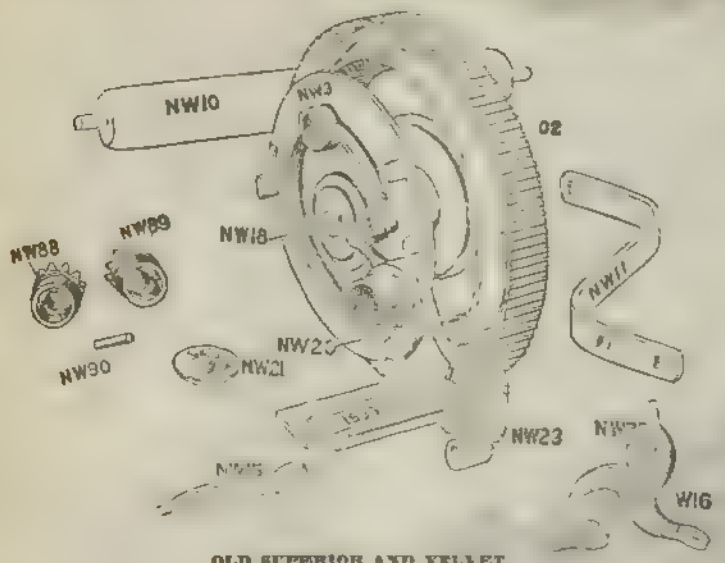
Plain Bearings; Three Steel Cutting Blades

Diameter of Driving Wheels, 8 in , Diameter of Cutting Blades, 5½ in Ball Pivoted Bed Knife Three Crucible Steel, Revolving Self Sharpening Blades Hardwood Roller Hand Painted and Striped All Shafting is full ⅝ in Diam . Grass Catcher Attachment

Width of Cut, In.	14	16	18
Weight, Each, Lbs.	38	41	43
Each	$3 00	3 25	3 50

One in a Box

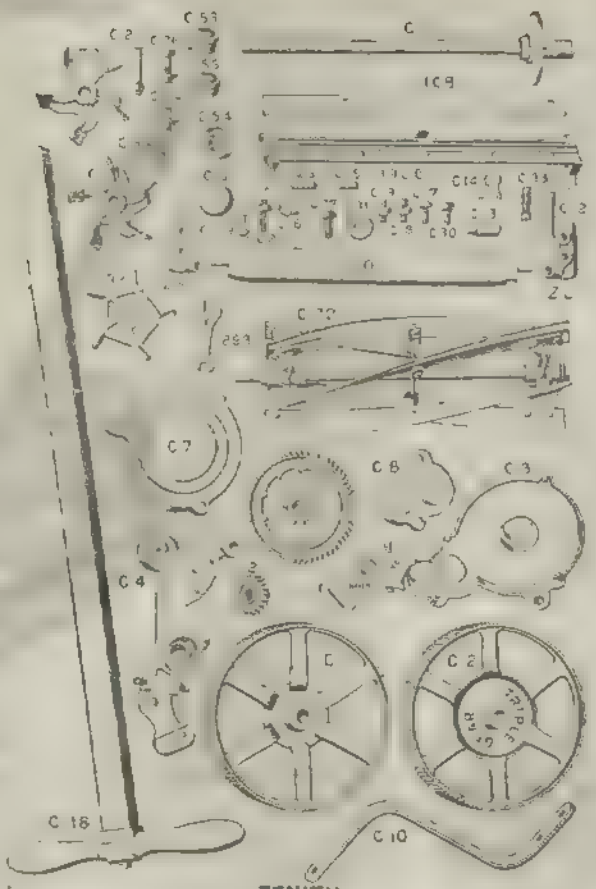
LAWN MOWER PARTS



OLD SUPERIOR AND VELVET

No.	Each
02—Drive Wheel, both alike.	$0.55
W2—Journal Bearings, both alike	.30
NHR—R. H. Roller Bracket	.15
NHL—L. H. Roller Bracket.	.25
NW3—R. H. Side Plate	1.25
NW2—L. H. Side Plate	1.25
1895—Straight Knife Bar—	
10-inch	1.00
12-inch	1 20
14-inch	1 30
16 inch	1 40
18-inch	1.50
NW8—Spiral Cutter, complete—	
10-inch	3 25
12-inch	3.75
14-inch	4.75
16-inch	5 25
18-inch	5.75
NW9—Spiral Cutter Blades—	
10-inch	40
12 inch	50
14-inch	.55
16-inch	.60
18-inch	.65

No.	Each
NW10—Wood Roller—	
10-inch	.35
12-inch	.45
14-inch	.55
16-inch	.65
18-inch	.75
NW11—Handle Irons, both alike—	
10-inch	.30
12-inch	.35
14-inch	.35
16-inch	.35
18-inch	.40
NW15—Wrench	.05
NW16—Spiral Cutter Spider (mortise if for center or which end)	.50
NW18—Drive Wheel Bolt	.10
NW20—Set Screw and Nut for Journal Box	.05
NW21—Drive Wheel Washer	.05
NW23—Roller Bracket Bolt.	.05
NW24—Bolt for Handle Iron	.05
NW25—Bolt for Straight Knife Bar	.05
NW26—Set Screw for Spider	10
NW50—Wood Handle, complete	1.00
NW88—R. H. Pinion	.30
NW89—L. H. Pinion	.30
NW90—Ratchet Pin	.05

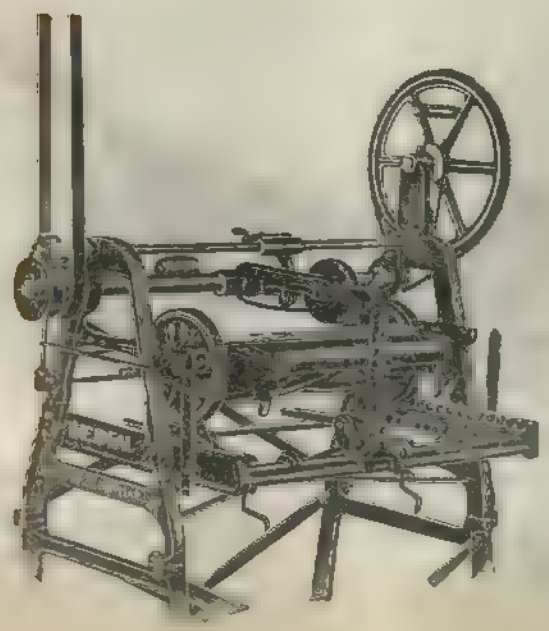


ZENITH

No.	Each
C1—Wheel, Left Hand	$1 50
C2—Wheel, Right Hand	1 50
C2—Intermediate Gear	50
C3—Side Plate, Left Hand	3 00
C4—Side Plate, Right Hand	2.50
C5—Pinion	40
C6—Washer for Ball-Bearing Cup	.05
C7—Outside Cap for Master Gear	..
C8—Shield	4
C9—Master Gear	1 00
C10—Handle Irons—	
14 inch	40
16-inch	50
18 inch	6
20 inch	7
C11—Ratchet Plate and Shaft	1.50
C12—Pin for Ratchet Plate on Shaft	50
C13—Shoulder Stud for N. 3 Gear	.50
C14—Ratchet	.10
C15—Wheel Shaft Pin	.05
C16—Nut for End of Knife Bar	15
C17—Lower Blade Screw	05
C18—Adjusting Screw and Nut for Ball Bearing Cup	.10
C19—Jamb Screw and Nut for Ball Bearing Cup	0
C20—Wood Roller—	
In. 14 16 18 20	
Each $0.60 .70 .80 .90	

No.	Each
C22—Reel Complete, with Five Knives—	
14-inch	5 00
16 inch	5 50
20 inch	6 50
C23—Pin for Pinion	05
C24—Roller Bracket Bolt	10
C25—Handle Iron Bolt	15
C26—Bolt Nut and Washer for End of Knife Bar.	15
C27—Cone Screw, Cup Point	.10
C28—Adjusting Screw for Center of Knife Bar	10
C29—Rivet for Spider	03
C30—Spider Set Screw	10
C31—Wheel Washer	05
C33—Adjusting Screw for Knife Bar	.10
C52—Ball Retainer and Balls	35
C53—Cone for Reel, both alike	50
C54—Ball-Bearing Cup	50
C55—Wheel Cones, both alike	50
69—R. H. Five Arm Spider.	1 00
70—L. H. Five Arm Spider.	1 00
93—Center Five Arm Spider	50
C10—Lower Blade—	
In. 14 16 18 20	
Each $0.60 .70 .80 .90	
1906—Knife Bar—	
In. 14 16 18 20	
Each $1 20 1.40 1.50 1 60	
1913—Wood Handle	1 00
ZL—R. H. Roller Bracket	15
ZL—L. H. Roller Bracket	15
1893—Wrench	10

LAWN MOWER SHARPENERS



IDEAL LAWN MOWER SHARPENERS

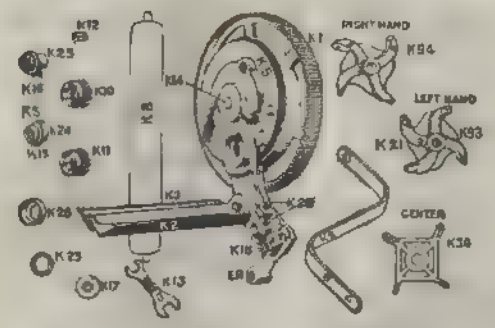
This Grinder will take in any Mower with Blades up to 24 in. Long; it is the only Grinder that will grind the Reel Knives, in case they are sprung or bent; the Straight Blade is ground without removing it from the Mower.

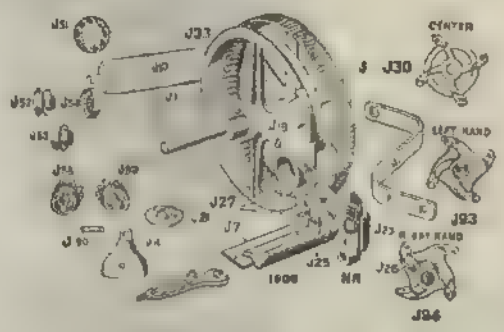
Width 30 in.; Size of Grinding Wheel 5x⅝ in.; Ball Bearing Hub; Grinding Wheel has a travel of 24 in.; Height from Floor to center of Main Shaft 36 in., Height Over-all 63 in.; Length Over-all 44 in.; Size of Tight and Loose Pulleys 4x1¾ in.; Speed of Pulleys 1,400 Revolutions per Minute.

	Each
No. 45—Hand Grinder; with Balance Wheel and Sub Base; Weight 200 Lbs.	$70.00
No. 50—Power Grinder; with Sub Base; Weight 200 Lbs.	70.00

Size of Motor Required for Power Grinder ¼ to ½ H. P.

LAWN MOWER PARTS



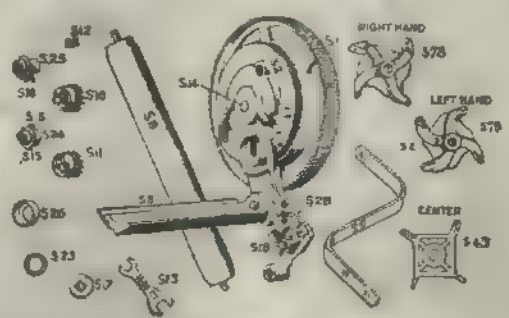


MARSWELLS PROFESSIONAL

No.	Each
K1—Drive Wheel, both alike	$4 80
KR—R. H. Roller Bracket	.15
KL—L. H. Roller Bracket	.15
K4—L. H. Side Plate	1.50
K5—R. H. Side Plate	1 50
K2—Straight Knife Bar—	
14-inch	7
16-inch	87
18-inch	98
20-inch	1 05
K3—Straight Knife—	
14-inch	.55
16-inch	.60
18-inch	65
20-inch	70
K6—Spiral Cutter, complete—	
14-inch	5 50
16-inch	6 00
18-inch	6 50
20-inch	7 00
K7—Spiral Cutter Blades, each—	
14-inch	55
16-inch	6
18-inch	65
20-inch	7
K8—Wood Roller—	
14-inch	.55
16-inch	65
18-inch	75
20-inch	80
K9—Handle Irons, both alike—	
14-inch	35
16-inch	35
18-inch	40
20-inch	45
K10—L. H. Pinion	.50
K11—R. H. Pinion	.50
K12—Double Ratchet Pin	.25
K13—Wrench	05
K14—Drive Wheel Bolt	.10
K15—Pointed Screw for R. H. Cone	.08
K16—Cup-pointed Screw for L. H. Cone	08
K17—Drive Wheel Washer	.05
K18—Roller Bracket Bolt	08
K19—Bolt for Handle Iron	08
K20—Screw for Lower Blade	05
K21—Set Screw for Spider	10
K93—Left Hand Spider	50
K94—Right Hand Spider	50
K90—Center Spider	.25
K22—Wood Handle, complete	1 00
K23—Ball Retainer and Balls	30
K24—Right Hand BB Cone	50
K25—Left Hand BB Cone	50
K26—Ball Bearing Cups	25
K27—Cone pointed Headless Set Screw for end of Knife Bar	10
K28—5-16 in. x 2 7-8-in. Screw, for Adjusting	.10
K29—Hex. Nut for Set Screw on end of Knife Bar	.05
K31—Cone for end of Knife Bar	.10
K32—Brass Eccentric for Knife Bar	25
K33—Machine Screw for Eccentric	.05
K34—Taper Pin for Cross Rod	.05
K35—Thumb Nut for Adjusting	.10

COUNTRY CLUB

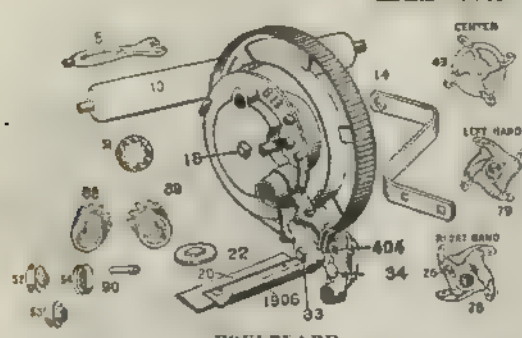
No.	Each
J—Drive Wheel, both alike	$4 85
N—R. Roller Bracket, right hand	.15
N—L. Roller Bracket, left hand	.15
J33—R. H. Side Plate	1 50
J34—L. H. Side Plate	1 50
J4—Pinion Cap	20
J1906—Straight Knife Bar—	
14-inch	75
16-inch	85
18-inch	.95
20-inch	1 05
J7—Straight Knife—	
14-inch	55
16-inch	60
18-inch	65
20-inch	70
J8—Spiral Cutter, complete	
14-inch	5 50
16-inch	6 00
18-inch	6 50
20-inch	7 00
J9—Spiral Cutter Blades—	
14-inch	55
16-inch	.60
18-inch	65
20-inch	70
J10—Wood Roller—	
14-inch	.65
16-inch	.70
18-inch	75
20-inch	.80
J11—Handle Irons, both alike—	
14-inch	35
16-inch	.35
18-inch	.40
20-inch	.45
J38—R. H. Pinion	.40
J39—L. H. Pinion	.40
J90—Double Ratchet Pins	05
J15—Wrench	05
J93—L. H. Spiral Cutter Spider	.50
J94—R. H. Spiral Cutter Spider	50
J30—Center Spiral Cutter Spider	50
J18—Pinion Cap Bolt	10
J19—Cutter for end of Wheel Shaft	05
J21—Drive Wheel Washer	.05
J1—Set Screw for Side Plate	.10
J23—Roller Bracket Bolt	08
J24—Bolt for Handle Iron	.08
J25—Bolt for Straight Knife Bar	.08
J26—Set Screw for Spider	.10
J27—Adjusting Screws for Knife Bar	.10
J30—Wood Handle, complete	1.00
J51—Ball Retainer and Balls	.30
J52—Right Hand BB Cone	.50
J53—Left Hand BB Cone	50
J54—Ball-Bearing Cups	.25



NEW NORTHERN KING

No.	Each
S1—Drive Wheel, both alike	$4 00
SR—R. H. Roller Bracket	.15
SL—L. H. Roller Bracket	15
S2—R. H. Side Plate	1 50
S3—L. H. Side Plate	1 50
S4—Straight Knife Bar—	
10-inch	55
12-inch	6
14-inch	.75
16-inch	.85
18-inch	.95
20-inch	1 05
S5—Straight Knife—	
10-inch	.45
12-inch	50
14-inch	55
16-inch	60
18-inch	.65
20-inch	.70
S6—Spiral Cutter complete—	
10-inch	$ 4.50
12-inch	5 00
14-inch	5 50
16-inch	6 00
18-inch	6 50
20-inch	7 00
S7—Spiral Cutter Blades—	
10-inch	45
12-inch	.50
14-inch	.55
16-inch	.60
18-inch	.65
20-inch	.70
S8—Wood Roller—	
10-inch	35
12-inch	45
14-inch	55
16-inch	.65
18-inch	.75
20-inch	.80
S9—Handle Irons, both alike—	
10-inch	25
12-inch	.25
14-inch	.35
16-inch	35
18-inch	40
20-inch	45
S10—L. H. Pinion	.50
S11—R. H. Pinion	.50
S12—Double Ratchet Pin	05
S13—Wrench	.05
S14—Drive Wheel Bolt	.10
S15—Pointed Screw for R. H. Cone	.08
S16—Cup-pointed Screw for L. H. Cone	.08
S17—Drive Wheel Washer	05
S18—Roller Bracket Bolt	08
S19—Bolt for Handle Iron	08
S20—Screw for Lower Blade	.05
S21—Set Screw for Spider	.10
S79—Left-Hand Spider	50
S78—Right Hand Spider	50
S42—Center Spider	.25
S23—Wood Handle, complete	1.00
S33—Ball Retainer and Balls	.30
S24—Right-hand BB Cone	.50
S25—Left hand BB Cone	50
S26—Ball-bearing Cups	.25
S28—Adjusting Screw to Knife Bar	.10

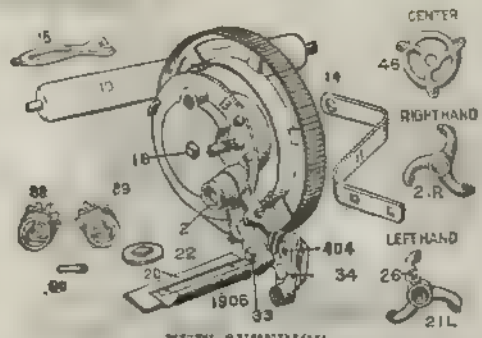
LAWN MOWER PARTS



BOULEVARD

No.	Each
14—Drive Wheel, both alike	$1.00
404—R. H. Roller Bracket	.15
405—L. H. Roller Bracket	.15
B13—R. H. Side Plate	1.25
B15—L. H. Side Plate	1.25
1906—Straight Knife Bar—	
12-inch	.75
14-inch	.75
16-inch	.85
18-inch	.95
20—Straight Knife—	
12-inch	.55
14-inch	.55
16-inch	.60
18-inch	.65
17—Spiral Cutter, complete—	
12-inch	3 50
14-inch	4 00
16-inch	4 50
18-inch	5 00
180—Spiral Cutter Blades—	
12-inch	.55
14-inch	.55
16-inch	.60
18-inch	.65
10—Wood Roller—	
12-inch	.55
14-inch	.55
16-inch	.65
18-inch	.75

No.	Each
11—Handle Irons, both alike—	
12-inch	.35
14-inch	.35
16-inch	.40
18-inch	.40
88—R. H. Pinion	.30
89—L. H. Pinion	.30
90—Rachet Pin	.05
16—Pin Wrench	.05
18—Drive Wheel Bolt	.10
79—Left hand Four-arm Spider	.50
78—Right hand Four arm Spider	.50
22—Drive Wheel Washer	.05
24—Bolt for Handle Iron	.08
26—Wood Handle, complete	1 00
26—Set Screw for Spider	.10
33—Machine Bolt for Knife Bar	.10
34—Roller Bracket Bolt	.08
35—Adjusting Screw for Knife Bar	.10
37—Cone for end of Knife Bar	.10
38—Pointed Screw for R. H Cone	.08
Cup-pointed Screw for L. H. Cone—	
43—Center Four-arm Spider	25
51—Ball Retainer and Balls	10
52—Right-hand BB Cone	50
53—Left-hand BB Cone	.50
54—Ball-bearing Cups	.25



NEW SUPERIOR

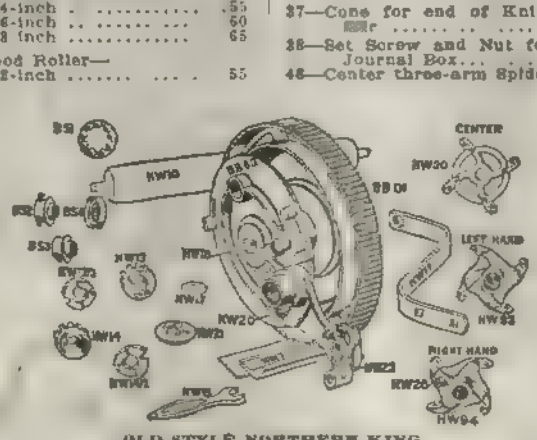
No.	Each
14—Drive Wheel, both alike	$1 00
2—Journal Bearings, both alike	.30
404—R. H. Roller Bracket	15
405—L. H. Roller Bracket	15
13—R. H. Side Plate	1.25
15—L. H. Side Plate	1.25
1905—Straight Knife Bar—	
12-inch	75
14-inch	75
16-inch	85
18-inch	95
20—Straight Knife—	
12-inch	.55
14-inch	.55
16-inch	.60
18-inch	.65
17—Spiral Cutter, complete—	
12-inch	3.50
14 inch	4.00
16-inch	4 50
18-inch	5.00
180—Spiral Cutter Blades—	
12-inch	.55
14-inch	.55
16-inch	60
18 inch	65
10—Wood Roller—	
12-inch	55

No.	Each
14-inch	.55
16-inch	.65
18-inch	.75
11—Handle Irons, both alike—	
12-inch	.35
14-inch	.35
16-inch	.35
18-inch	.40
88—R. H. Pinion	.30
89—L. H. Pinion	.30
90—Rachet Pin	.06
16—Pin Wrench	.05
18—Drive Wheel Bolt	.10
21—L. Left-hand three arm Spider	50
21—R. Right-hand three arm Spider	.50
22—Drive Wheel Washer	.05
24—Bolt for Handle Iron	.08
25—Wood Handle, complete	1.00
26—Set Screw for Spider	.10
33—Machine Bolt for Knife Bar	.10
34—Roller Bracket Bolt	.08
35—Adjusting Screw for Knife Bar	.10
37—Cone for end of Knife Bar	.10
38—Set Screw and Nut for Journal Box	.08
48—Center three-arm Spider	.25

HARTFORD

No.	Each
E1—Drive Wheel, both alike	$1 00
ER—R. H. Roller Bracket	.15
EL—L. H. Roller Bracket	15
E2—L. H. Side Plate	1 50
E3—R. H. Side Plate	1 50
E4—Straight Knife Bar—	
14-inch	75
16-inch	.85
18-inch	.95
20-inch	1 05
E5—Straight Knife—	
14-inch	55
16-inch	60
18-inch	.65
20-inch	70
E6—Spiral Cutter, complete—	
14-inch	5.50
16-inch	6 00
18-inch	6 50
20-inch	7.00
E7—Spiral Cutter Blades—	
14-inch	55
16-inch	60
18-inch	65
20-inch	70
E8—Wood Roller—	
14-inch	.55
16-inch	.6
18-inch	75
20-inch	.80

No.	Each
E9—Handle Irons, both alike—	
14-inch	.35
16-inch	.35
18-inch	.40
20 inch	.45
E10—L. H. Pinion	.50
E11—R. H. Pinion	50
E12—Double Ratchet Pin	.25
E13—Wrench	05
E14—Drive Wheel Bolt	10
E15—Pointed Screws for R. H. Cone	.08
E16—Cup-pointed Screw for L. H. Cone	.08
E17—Drive Wheel Washer	.05
E18—Roller Bracket Bolt	.08
E19—Bolt for Handle Iron	.05
E20—Screws for Lower Blade	.05
E21—Set Screw for Spider	.10
F91—Left Hand Spider	.50
E90—Right Hand Spider	.50
E92—Center Spider	.25
E22—Wood Handle, complete	1.00
E23—Ball Retainer and Balls	.15
E24—Right Hand BB Cone	.50
E25—Left Hand BB Cone	.50
E26—Ball-Bearing Cups	.25
E27—Center Knife Bar Adjusting Screw	.10
E28—Adjusting Screws to Knife Bar	.10



OLD STYLE NORTHERN KING

No.	Each
HW—Drive Wheel, both alike	$1.00
HR—Roller Bracket, right	.15
HL—Roller Bracket, left	.15
BB83—R. H. Side Plate	1 50
BB82—L. H. Side Plate	1 50
HW7—Straight Knife and Bar—	
14 inch	1 55
16-inch	1 70
18-inch	2 00
20 inch	2 25
HW8—Spiral Cutter, complete—	
14-inch	5.50
16-inch	6 00
18-inch	6 50
20-inch	7 00
HW9—Spiral Cutter Blades—	
14-inch	.55
16-inch	.60
18-inch	.65
20 inch	.70
HW10—Wood Roller—	
14-inch	.55
16-inch	.65
18-inch	.75
20 inch	80
HW11—Handle Irons, both alike—	
14-inch	.35
16-inch	.35
18-inch	.40
20-inch	.45
HW13—L. H. Pinion	.50
HW14—R. H. Pinion	.50

No.	Each
HW13½—R. H. Ratchet Clutch	.25
HW14½—L. H. Ratchet Clutch	.25
HW15—Wrench	05
HW17—Grinding Wire	.02
HW18—Drive Wheel Bolt	.10
HW19—Cutter for end of Cutter Shaft	.05
HW20—Pointed Screw for R. H. Cone	.08
Cup pointed Screw for L. H Cone	.08
HW21—Drive Wheel Washer	05
HW22—Screw for Front Cross Bar	.10
HW23—Roller Bracket Bolt	.08
HW24—Bolt for Handle Iron	.08
HW25—Bolt for Straight Knife Bar	.08
HW26—Set Screw for Spider	.10
HW93—Left Hand Spider	50
HW94—Right Hand Spider	50
HW30—Canter Spider	25
HW49—Pin for Rachet Clutch	.05
HW50—Wood Handle, complete	1.00
HW51—Ball Retainer and Balls	30
HW52—Right Hand BB Cone	.50
HW53—Left Hand BB Cone	.50
HW54—Ball-bearing Cup	.25

BRASCOLITE FIXTURES

The Fixture with its own Reflector, making it unnecessary to have the Walls and Ceilings of the Rooms where they are installed certain colors in order to get the best distribution of light

More Efficient; Better Quality; Uniform Distribution; Good Ventilation; Less Drop in Efficiency; Easier to Maintain; Excellent Construction

The Brascolite is absolutely the best lighting unit in existence for any purpose, and its adaptability meets the requirements, practically without exception, for every purpose.

The Efficiency is obtained because the arrangement utilizes the total lumens of the lamp, and because of the reflection of all light rays from the flat plane to one direction, and because of the low absorption of the special semi-translucent glass used. A photometric test indicated the total efficiency of the Brascolite a fraction over 82%; By comparison with photometric tests made of direct reflectors, you will find that it is more efficient than 90% of the direct reflectors and that it is over 30% more efficient than ordinary semi-indirect lighting and over 50% more efficient than indirect lighting installed under most favorable conditions; The effective lumens on the working plane of the Brascolite in general installations exceeds 65% of the total lumens of the lamp.

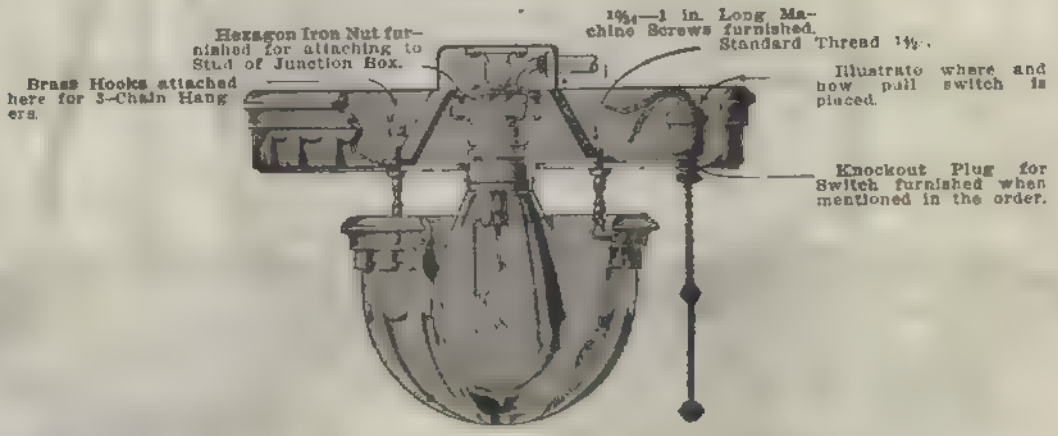
The Quality of the light and the **Uniform Distribution** are as good as any artificial light produced by any method, due to all light rays being diffused through the glass or reflected from the dull white plane

The Drop in Efficiency is less in Brascolites than with direct reflectors or with indirect Fixtures; A test indicated a 3% drop in the Brascolite, a 5% drop in the direct reflected light and a 7% drop in the indirect unit. This advantage in Brascolites indicating 40% less than direct and 57% less than indirect lighting is a constant saving. This is not only due to the construction of the fixture, which eliminates a great accumulation of dust, but also to perfect ventilation.

Maintenance of Brascolites requires about one-third the labor of direct reflected or indirect lighting units, for the bowl can be unhooked and wiped out without replacing the lamp.

Mechanical Features are simple, substantial and practical. Brascolites are made and shipped for installation on any standard outlet, with all necessary parts included, They are furthermore packed in jute cartons, made to railroad specifications, and can be delivered on the job without assembling.

On account of Brascolites being so well ventilated, they are especially adapted for use with Type C or Nitrogen Filled Lamps, as these lamps heat up rapidly when current is on and the fixture in which they are used must allow of the free circulation of air around the lamp.


Hexagon Iron Nut furnished for attaching to Stud of Junction Box.
1⅜—1 in. Long Machine Screws furnished. Standard Thread 1⅛".
Brass Hooks attached here for 3-Chain Hangers.
Illustrate where and how pull switch is placed.
Knockout Plug for Switch furnished when mentioned in the order.

This illustration is a cross-section of the Type AC Brascolite and shows the simple, substantial and practical construction, also the method of installing all similar types of Brascolites to standard electric outlets; No insulating joints, canopy insulators or splicing of wires are necessary. The tripod is attached to the fixture stud of a junction box with a hexagon iron nut, or to the ears in 3 in. or 4 in junction boxes with 10-24 machine screws; The house wires are cut and slipped beneath the terminal screws of the porcelain socket; Another feature illustrated is the turned brass spindles— these, with the screw end and the hook are made in one piece, They support the body of the Brascolite independently of the Bowl, and permit the adjustment of the body-flush to the ceiling; These spindles also prevent the Bowl from swinging; The loops on the inside of the Bowl are easily unhooked, and the Bowl can be left hanging on one or two spindles for cleaning or replacing the lamp; Brascolites with stems are equipped with regular fixture tripods and ⅜ in insulating joints; Wire ways are ½ in. diameter. A knockout hole in the Reflector for the attachment of a pull switch will be furnished when mentioned in the order

BRASCOLITE FIXTURES

Hang Brascolites high; We recommend close ceiling types

TYPE FB

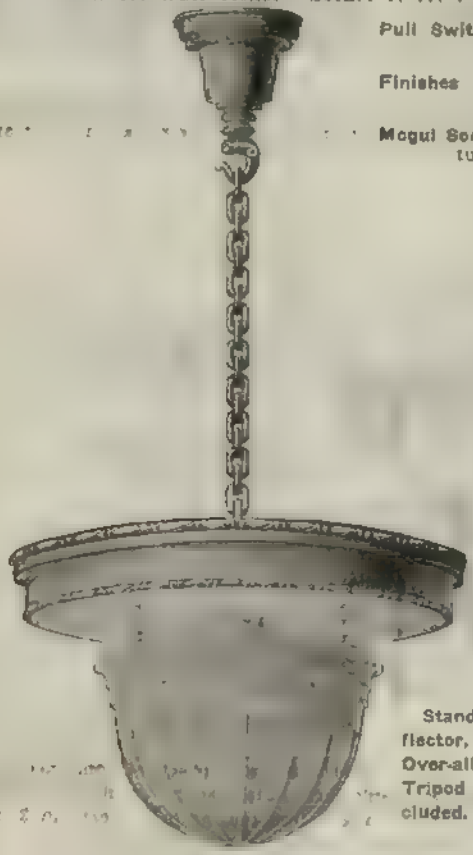
Band, Brush Brass Finish; Reflector, White Enameled Steel

	Size	Out. Diam., In.	Diam. Bowl, In.	Weight, Lbs.	Each
No. FB100—	40-60 or 100 Watt, Medium Socket	11	6¼	13	$11.00
No. FB200—	100 or 200 Watt, Medium Socket	16	8¼	19	13.50
No. FB300—	200 or 300 Watt, Medium Socket	19	11½	33	17.75
No. FB500—	400 or 500 Watt Mogul Socket	23	14½	50	24.50

Pull Switch concealed in body and wired, $1.50 additional List

Finishes other than specified will delay shipment

Mogul Socket furnished with the 19 in. Fixture at $1.00 additional List



TYPE GB

TYPE HB

Standard Finish, Brush Brass; Reflector, White Enameled Steel; Length Over-all 4 ft.; ⅜ in. Insulating Joint; Tripod and Silk Covered Wire included.

Nos.	Size	Out. Diam. In	Diam. Bowl In.	Wt. Lbs	Each
GB100—	40-60 or 100 Watt, Medium Socket.	11	6¼	17	$14.50
GB200—	100 or 200 Watt, Medium Socket.	16	8¼	24	17.00
GB300—	200 or 300 Watt, Medium Socket.	19	11½	44	22.50
GB500—	400 or 500 Watt, Mogul Socket.	23	14½	72	29.25

Additional Length, per ft., 50c List

Pull Switch concealed in body and wired, $1.50 additional List

Finishes other than specified will delay shipment

Mogul Socket furnished with 19 in. Fixture at $1.00 additional List

Nos.	Size	Out. Diam. In	Diam. Bowl In.	Wt. Lbs	Each
HB100—	40-60 or 100 Watt, Medium Socket.	11	6¼	19	$15.50
HB200—	100 or 200 Watt, Medium Socket.	16	8¼	25	18.00
HB300—	200 or 300 Watt, Medium Socket.	19	11½	44	22.75
HB500—	400 or 500 Watt, Mogul Socket.	23	14½	71	29.50

Additional Length, per ft., 50c List

Pull Switch concealed in body and wired, $1.50 additional List

Finishes other than specified will delay shipment

Mogul Socket furnished with 19 in. Fixture at $1.00 additional List

BRASCOLITE FIXTURES

Hang Brascolites high; We recommend close ceiling types

TYPE IB

Band, Brush Brass Finish; Reflector, White Enameled Steel

Size	Out Diam., In.	Diam. Bowl, In.	Weight, Lbs.	Each
No. IB100—40-60 or 100 Watt, Medium Socket	11	6¼	11	$10 50
No. IB200— 100 or 200 Watt, Medium Socket	16	8¼	18	13 00
No. IB300— 200 or 300 Watt, Medium Socket	19	11⅛	33	16 50
No. IB500— 400 or 500 Watt, Mogul Socket	23	14⅛	48	22 50

Pull Switch concealed in body and wired, $1 50 additional List

Finishes other than specified will delay shipment

Mogul Socket furnished with the 19 in. Fixture at $1.00 additional List

TYPE JB

TYPE KB

Standard Finish, Brush Brass; Reflector, White Enameled Steel; Length Overall 4 ft.; ⅜ in. Insulating Joint; Tripod and Silk Covered Wire Included.

Nos.	Size	Out Diam. In.	Diam. Bowl In.	Wt. Lbs.	Each
JB100	40-60 or 100 Watt, Medium Socket	11	6¼	16	$14 00
JB200	100 or 200 Watt, Medium Socket	16	8¼	23	16 50
JB300	200 or 300 Watt, Medium Socket	19	11⅛	43	21 25
JB500	400 or 500 Watt, Mogul Socket	23	14⅛	69	27.25

Additional Length, per ft., 50c List

Pull Switch concealed in body and wired, $1 50 additional List

Finishes other than specified will delay shipment

Mogul Socket furnished with 19 in Fixture at $1 00 additional List

Nos.	Size	Out. Diam In	Diam Bowl In	Wt Lbs.	Each
KB100	40-60 or 100 Watt, Medium Socket	11	6¼	18	$15 00
KB200	100 or 200 Watt, Medium Socket	16	8¼	30	17 50
KB300	200 or 300 Watt, Medium Socket	19	11⅛	43	21 50
KB500	400 or 500 Watt, Mogul Socket	23	14⅛	69	27 50

Additional Length, per ft., 50c List

Pull Switch concealed in body and wired, $1 50 additional List

Finishes other than specified will delay shipment

Mogul Socket furnished with 19 in Fixture at $1 00 additional List

BRASCOLITE FIXTURES

Hang Brascolites high; We recommend close Ceiling types

OFFICE BUILDING, TYPE AD

Nos.	Size	Receptacle	Out. Diam., In	Diam Bowl, In	Wt., Lbs	Each
AD100	40-60-100 Watt	Regular	11⅜	6¼	9	$ 7 00
AD200	100-200 Watt	Regular	14½	8¼	12	9 00
AD300	200-300 Watt	Regular	17½	11½	16	11 50
AD500	400-500 Watt	Mogul	22	14½	22	17 00

Pull Switch concealed in body and wired $1.50 additional List
Mogul Receptacle, for 17½ in. size, $1.00 additional List

TYPE NB

Sand, Brush Brass Finish; Reflector, White Enameled Steel

Nos.	Size	Socket	Out Diam., In	Diam. Bowl, In	Wt., Lbs	Each
NB100	40-60-100 Watt	Medium	11	6	9	$ 8 50
NB200	100-200 Watt	Medium	16	8¼	17	10 50
NB300	200-300 Watt	Medium	19	11½	30	14 00
NB500	400-500 Watt	Mogul	23	14½	46	20 00

Pull Switch concealed in body and wired, $1.50 additional List
Mogul Socket furnished with the 19 in. Fixture at $1.00 additional List
Finishes other than specified will delay shipment

Standard Finish, Brush Brass; Reflector, White Enameled Steel; Length Over-all 4 ft.; ⅜ in. Insulating Joint; Tripod and Silk Covered Wire included.

TYPE OB

Nos.	Size	Out. Diam. In	Diam. Bowl In	Wt. Lbs.	Each
OB100	40-60 or 100 Watt, Medium Socket.	11	6	15	$12 00
OB200	100 or 200 Watt, Medium Socket.	16	8¼	22	14 00
OB300	200 or 300 Watt, Medium Socket.	19	11½	41	18 75
OB500	400 or 500 Watt, Mogul Socket.	23	14½	68	24.75

Additional Length, per ft., 50c List
Pull Switch concealed in body and wired, $1.50 additional List
Finishes other than specified will delay shipment
Mogul Socket furnished with the 19 in. Fixture at $1.00 additional List

TYPE PB

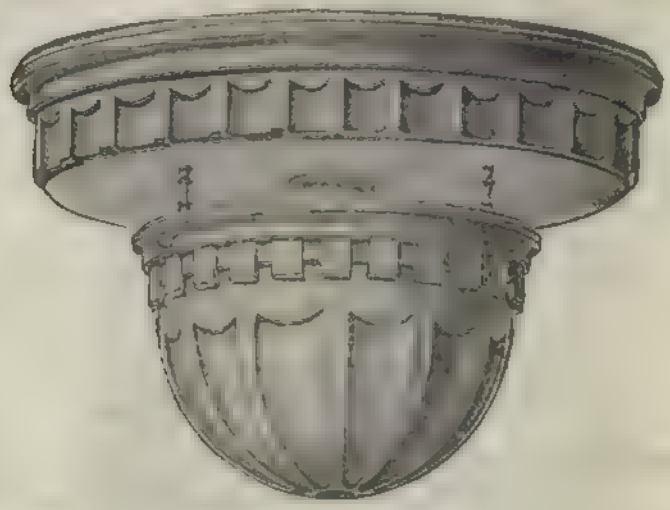
Nos.	Size	Out. Diam. In	Diam Bowl In.	Wt. Lbs.	Each
PB100	40-60 or 100 Watt, Medium Socket.	11	6	16	$13 00
PB200	100 or 200 Watt, Medium Socket	16	8¼	23	15 00
PB300	200 or 300 Watt, Medium Socket	19	11½	42	19 00
PB500	400 or 500 Watt, Mogul Socket	23	14½	68	25 00

Additional Length, per ft., 50c List
Pull Switch concealed in body and wired, $1.50 additional List
Finishes other than specified will delay shipment
Mogul Socket furnished with the 19 in. Fixture at $1.00 additional List

BRASCOLITE FIXTURES

WHITE PORCELAIN, ALL WHITE REFLECTORS

Hang Brascolites high; We recommend close Ceiling types



TYPE AC

White Porcelain Reflector

Size	Out. Diam. In.	Diam. Bowl In.	Weight Lbs.	Each
No. AC200—100 or 200 Watt, Medium Socket	15	8¼	32	$14.00
No. AC300—200 or 300 Watt, Medium Socket*	18½	11½	45	20 50

Pull Switch concealed in body and wired, $1 50 additional List

*Mogul Socket furnished with the 18½ in. Fixture at $1.00 additional List

TYPE DC

Brush Brass Finish, White Porcelain All White Reflector; ⅜ in. Insulating Joints, Tripod and Silk Covered Wire included

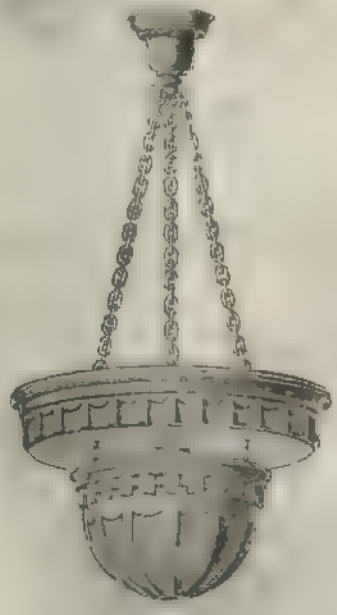
Nos. Size	Out. Diam. In.	Diam. Bowl In.	Wt. Lbs.	Each
DC200—100 or 200 Watt Medium Socket	15	8¼	38	$17 50
DC300—200 or 300 Watt Medium Socket*	18½	11½	52	25.25

Additional Length, per ft., 50c List

Pull Switch concealed in body and wired, $1.50 additional List

Finishes other than specified will delay shipment

*Mogul Socket furnished with the 18½ in. Fixture at $1 00 additional List



TYPE EC

Brush Brass Finish; White Porcelain All White Reflector ⅜ in. Insulating Joints; Tripod and Silk Covered Wire included

Nos. Size	Out. Diam. In.	Diam. Bowl In.	Wt. Lbs.	Each
EC200—100 or 200 Watt, Medium Socket	15	8¼	39	$18 50
EC300—200 or 300 Watt, Medium Socket*	18½	11½	53	25 50

*Mogul Socket furnished with the 18½ in Fixture at $1 00 additional

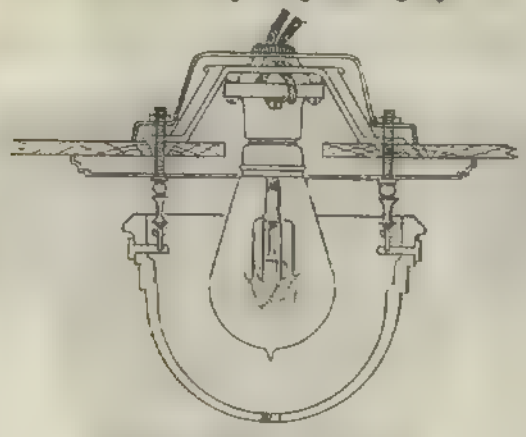
Pull Switch concealed in body and wired $1 50 additional List

Finishes other than specified will delay shipment

Mogul Socket furnished with the 18½ in Fixture at $1 00 additional List

BRASCOLITE FIXTURES

For Factory Shipment Only



SHOW WINDOW TYPE SC

Reflector, White Enameled Steel

Size	Out. Diam. In.	Diam. Bowl In.	Weight Lbs.	Each
No. SC200—100 or 200 Watt, Medium Socket	12	8¼	10	$ 9.00
No. SC300—200 or 300 Watt, Medium Socket*	14½	11½	12	11 50

*Mogul Socket furnished with the 14½ in. Fixture at $1.00 additional List

HOSPITAL TYPE BC

White Enamel or any Standard Finish; Reflector, White Enameled Steel

No.	Size	Out. Diam. In.	Diam Bowl In.	Wt. Lbs.	Each
BC100	40, 60 or 100 Watt	11	8	10	$8.00

Pull Switch concealed in body and wired, $1.50 additional List

GYMNASIUM TYPE BD

Same as Type NB, but with Wire Guard

Nos.	Size	Socket	Out. Diam., In.	Diam. Bowl, In.	Wt., Lbs.	Each
BD100	40-60-100 Watt	Medium	11	6	12	$12 25
BD200	100-200 Watt	Medium	16	8¼	21	16 00
BD300	200-300 Watt	Medium*	19	11½	35	21.50
BD500	400-500 Watt	Mogul	23	14½	53	30.00

*Pull Switch concealed in body and wired, $1.50 additional List

Mogul Receptacles furnished with 18 in. Reflector at $1.00 additional List

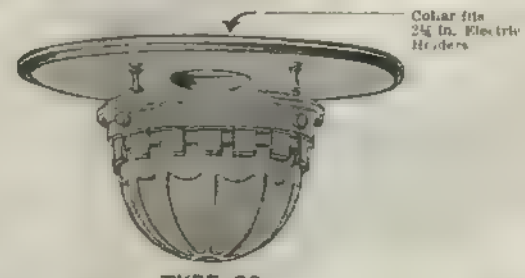
HOSPITAL TYPE CB

White Enamel or any Standard Finish; Reflector, White Enameled Steel; ¾ in. Insulating Joint; Tripod and Wire included; Length Over-all 2 ft.

Nos.	Size	Out. Diam. In.	Diam. Bowl In.	Wt Lbs	Each
CB60	— 40 or 60 Watt	12	8½	12	$10 00
CB200	—100 or 200 Watt	16	11½	21	13 00

Additional Length, per ft., 50c List

Pull Switch attached to the body and wired, $1 50 additional List



TYPE GC

Can be attaced to old Fixtures having 2¼ in. Shade Holder

No	Size	Out. Diam., In	Diam. Bowl, In	Fitter, In.	Wt., Lbs.	Each
GC100	—40-60-100 Watt	10	6	2¼	9	$ 6 50
GC200	—100-200 Watt	10½	6¼	3¼	12	8 50
GC300	—200-300 Watt	17½	11½	3¼	16	11 00

Price does not include Socket

BRASCOLITE FIXTURES

For Factory Shipment Only

Finishes other than specified will delay shipment and will take an advance of 10%

TYPE RB

Bracket Metal, Band Compo, Rose Gold Finish; Reflector, White Enameled Steel

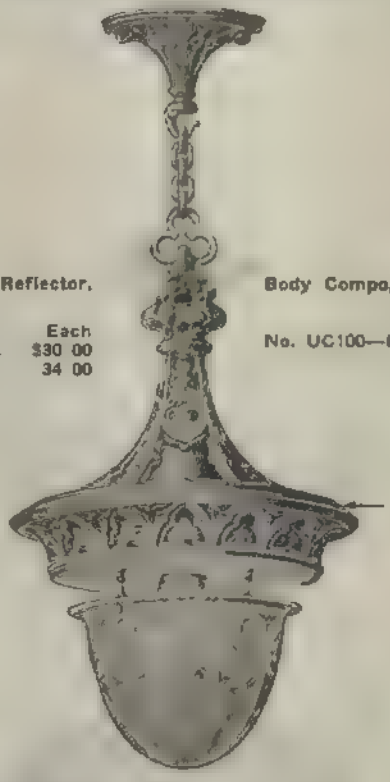
Nos.	Watt	Extends	Bowl	Length	Weight	Each
RB100	40-60-100	18 in.	7 in.	26 in.	38 Lbs.	$30 00
RB200	100-200	20 in.	9 in.	26 in.	40 Lbs	34 00

TYPE UC

Body Compo, Rose Gold Finish; Extends 13" in.; Diam. of Bowl 8 in.; Lenght Over-all 21 in.

	Each
No. UC100—60 or 100 Watt...	$18.00

Weight 24 Lbs Each



TYPE XB

Body Compo, Rose Gold Finish; Reflector, White Enameled Steel; Length Over-all 5 ft.; ⅜ in. Insulating Joint; Tripod and Silk Covered Wire Included

Nos.	Size	Socket	Out. Diam., In	Diam. Bowl, In.	Wt., Lbs	Each
XB200—100-200	Watt	Medium	17	9	75	$31 00
XB300—200-300	Watt	Medium	22	11½	115	42 00
XB500—400-500	Watt.....	Mogul	27	16	170	58 00

Additional Length, per ft., 40c List

Pull Switch concealed in body and wired, $2.00 additional List

TYPE QB

Is the Fixture up to the Arrow, see Illustration

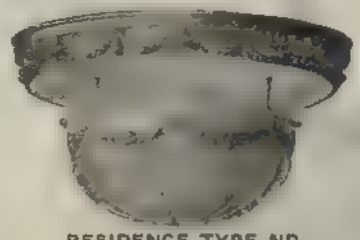
Nos.	Size	Socket	Out. Diam., In.	Diam. Bowl, In	Wt., Lbs.	Each
QB100—40-60-100	Watt.	Medium	14	7	30	$14 00
QB200—100-200	Watt..	Medium	17	9	50	20 00
QB300—200-300	Watt..	Medium	22	11½	85	29 00
QB500—400-500	Watt .	Mogul	27	16	140	43 00

RESIDENCE TYPE MD

Any Standard Finish; Rose Decorated Bowl in Natural Colors; Reflectors, White Enameled Steel

Nos.	Size	Socket	Out Diam In.	Diam Bowl In.	Wt., Lbs.	Each
MD200—100-200	Watt	Medium	16	12	20	$18 00
MD300—200-300	Watt	..Medium	19	14	35	22.00

Mogul Socket, for No MB300, $1 00 List Additional



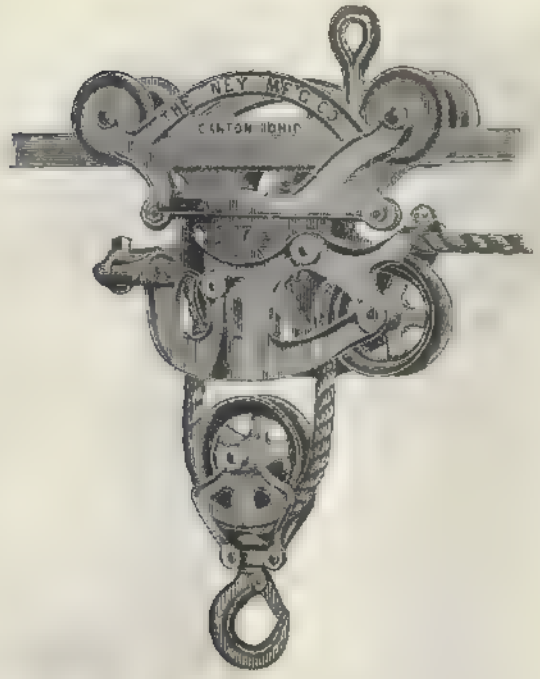
RESIDENCE TYPE ND

Any Standard Finish; Rose Decorated Bowl in Natural Colors; Reflector, White Enameled Steel

Nos.	Size	Socket	Out. Diam., In	Diam. Bowl In	Wt., Lbs.	Each
ND200—100-200	Watt	Medium	16	12	20	$19 50
ND300—200-300	Watt .	Medium	19	14	35	24.50

Mogul Socket, for No ND300, $1 00 List Additional

GENUINE NEY FORK HAY CARRIERS



No. 85

FOR STEEL TRACK

All the Travelers and Sheaves Revolve on turned Bushings which insures the lightest possible draft.

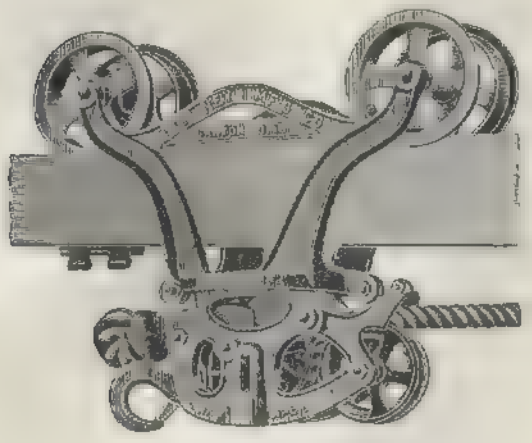
The Throats of all Ney Carriers have an exceptionally large opening and the Locking Mechanism is so arranged that the Lifting Pulley cannot fail to enter and lock securely to the Carrier under all conditions

The Locks are operated without the use of Springs; the Ney Carrier takes up less room in the mow than other makes and has less parts; patented Snap Hook on Lifting Pulley.

Made of best grade of Malleable Iron, finished in Aluminum Bronze and Fully Warranted to give entire satisfaction when properly put up and used.

	Each
No. 85—Swivel Reversible for Ney Double Angle Steel Track	$7.00

Weight 25 Lbs. Each



FOR WOOD TRACK

This Carrier is the same as the No. 85, except that it is made to Run on 4x4 in. Wood Track; all Working Parts are interchangeable with the No. 85; made of Best Malleable Iron and finely finished in Aluminum Bronze, Swivel Reversible.

	Each
No. 90—For 4x4 in. Wood Track	$7.00

Weight 30 Lbs. Each

CABLE CARRIERS

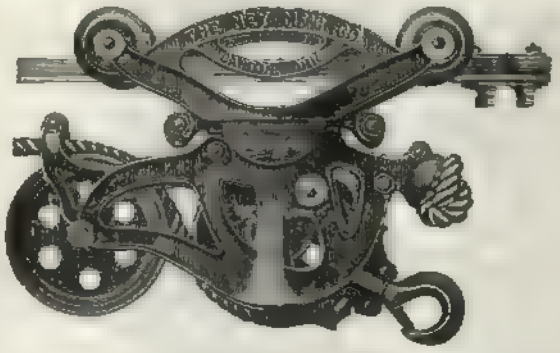
Work Successfully on Any Size Cable from ½ to ¾ Inches

The same Bumper or Trip Block is used for any of the above sized Cable; All Working Parts are Interchangeable with the No. 85 and 90, except the Trip Block.

	Each
No. 80—Reversible; for Cable	$7.00

Weight 25 Lbs. Each

GENUINE NEY HAY CARRIERS



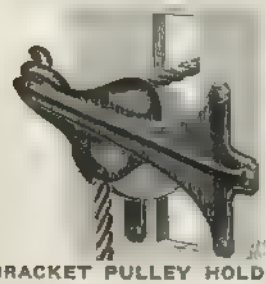
FOR CABLE DRAFT

This Carrier is the Lightest Draft Fork Carrier Made; It is Heavy, Large and exceptionally Strong. It is intended for Extra Hard Work the Draft Sheave, also the Sheave in the Lifting Pulley are 7 in. in Diam. and Revolves on Large Roller Bearings, thus greatly reducing friction. It is a Perfect Wide Mouth Carrier and will allow the Lifting Pulley to be carried as near the track as other Carriers using small Sheaves.

	Each
No. 170—For Steel Track; To Operate with Manila Rope	$9 00
No. 175—For Steel Track; To Operate with Wire Rope	$9 00

Weight 38 Lbs. Each

PULLEY HOLDERS



BRACKET PULLEY HOLDERS

	Per Dozen
No. 0—Holders Only, without Bolts	$7.20

Weight 3 Lbs. Each

HINGES

NEY'S GABLE END BARN DOOR HINGES

	Per Doz. Pairs
No. 32—Made of Best Malleable Iron, Aluminum Finish, Heavy and Compact; By use of these Hinges the Door is allowed to lap on the siding, making the Door Storm and Rain-Proof	$9.60

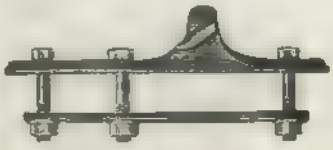
Weight 48 Lbs. per Dozen Pairs

TRIP BLOCKS

TRIP BLOCKS

	Each
No. 085—Extra Trip Blocks for Ney's No. 85 Hay Carriers	$0.50

Weight ⅞ Lb. Each



	Each
No. 0150—Extra Trip Blocks for No. 150 Ney Hay Carriers	$0.75

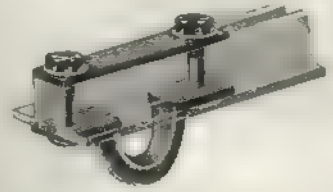
Weight 1¼ Lbs. Each

FORK ATTACHMENTS

FORK ATTACHMENTS OR LINKS

	Each
No. 3—Attachment or Link; Is used on Nos. 150 and 200 Sling Hay Carriers to attach the two Lifting Pulleys together when one Fork is to be used in place of Hay Slings	$0 50

Weight ⅜ Lb. Each



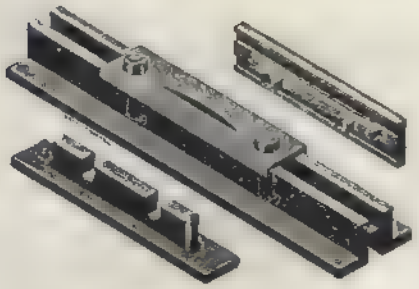
PULLEY FASTENER AND CARRIER STOP

For use on end of Track to keep Carrier from running off the Track

	Per Dozen
No. 00—Pulley Fasteners and Carrier Stop	$2.00

Weight ⅝ Lb. Each

NEY HAY CARRIER TRACK AND FIXTURES



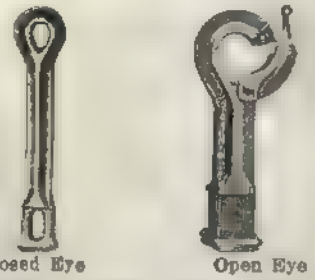
NEY DOUBLE ANGLE STEEL TRACK

Patent Splice or Coupling enables track to be put together with the aid of Wrench only; impossible for Carrier to run off this Track.

Per Foot

Ney Track—In 6, 8 and 12 ft. Lengths, Complete with Splices $0.20

Weight 2¼ Lbs. per Foot



Closed Eye Open Eye

DOUBLE ANGLE TRACK EYES

Malleable Iron

For Hanging Ney's Double Angle Steel Track

Per Dozen

No. 67—Closed Eye; Length 5½ in.; inserted by driving in from under side of the Track midway between the Space Blocks on the Track, then moved to the desired point.....$1.40

No. 067—Open Eye; Used same as above; Track can be readily removed 1.40

Open Stock; Weight 5 Lbs. per Dozen

RAFTER BRACKETS

Per Dozen

No. 60—Steel, Crimped; 6 in. Wide from point to point $0.60

Open Stock; Weight 4 Lbs. per Dozen

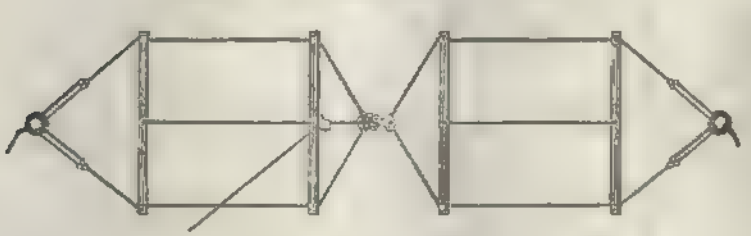
RIDGE POLE BRACKETS

Per Dozen

No. 3—Wrought Iron; Width 4 in....$1.00

Weight 4¼ Lbs. per Dozen

HAY AND GRAIN SLINGS



NEY'S STANDARD CENTER TRIP SLINGS

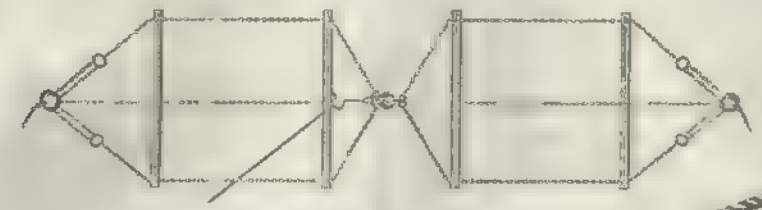
Will Handle Fine or Coarse Hay, Straw, Corn Stalks, Grain, etc. The Ney Slings used with the No. 150 Ney Carrier Deposits the load in the Mow in the same position as it was on the wagon. Made of Best Material, Adjustable to Fit any Length Rack.

Each

No. 42—Standard; 4 ft. Bars, Two Ropes, Weight 23 Lbs. $3.20

No. 53—Standard; 5 ft. Bars; Three Ropes, Weight 26 Lbs. 4.00

No. 64—California; 6 ft. Bars; Four Ropes; Weight 31 Lbs. 5.00



NEY'S STANDARD CHAIN SLINGS

Made of 4-0 Rust Proof Wire Chain, making a much stronger Sling and one that will outlast any other make. In construction they are the same as the Rope Slings, having all the Adjustments, etc.; Made of the best material.

Each

No. 153—Standard; 5 ft. Bars; Three Chains; Weight 30 Lbs. $5.00

No. 153C—California; 5 ft. Bars; Three Chains; Weight 35 Lbs..... 7.00

No. 164—California; 6 ft. Bars; Four Chains; Weight 40 Lbs..... 7.00

CENTER TRIPS

Each

No. 5—Extra Center Trip or Sling Center Locks for Standard Hay Slings; Can be used on any Center Trip Sling $1.00

Weight 1 Lb. Each

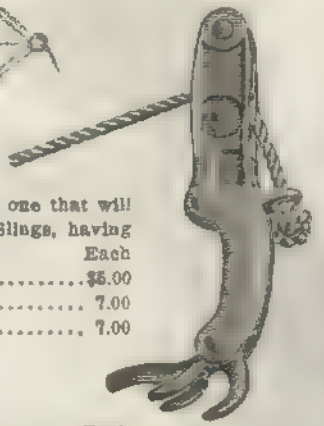
END TRIP ROPE SLINGS

Made of Best Quality ½ inch Rope, Adjustable to any sized Hay Rack; Rings and Eyes made of best grade Malleable Iron. Made with two or three Ropes.

Each

No. 75—2 Rope; Weight 3½ Lbs $1.50

No. 70—3 Rope; Weight 4½ Lbs. 2.00



END TRIP SLING LOCKS

These Locks are used with End Trip Slings and can be used with either the Two or Three Rope Slings, without any change.

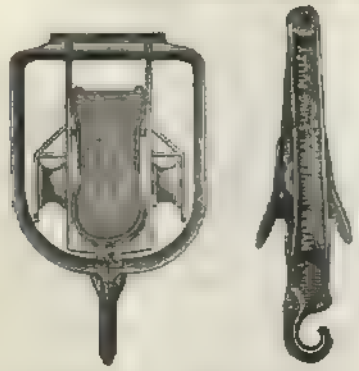
Can be attached to any make of Hay Carrier.

Each

No. 327—Malleable Iron; Aluminum Bronze Finish $2.00

Weight 1½ Lbs. Each

HAY CARRIER SUNDRIES AND HAY RACK CLAMPS



UNIVERSAL SLING PULLEYS

For Converting any Fork Carrier into a Sling Carrier — Each

Universal—It cannot be misplaced on the load; can be used either side up and with any style of Fork Pulley; the Hay is Deposited in the Mow in the same relative position as on the wagon $3.00
Weight 15 Lbs. Each

SWIVEL ROPE HITCHES

Per Dozen

No. 86—A very convenient Device for Taking Up and Letting Out Rope; Malleable Iron, with Swivel Rope Hitch $3.20
Weight 20 Lbs. per Dozen

WOOD TRACK HANGING HOOKS

Made of Wrought Steel, ½ in. Stock

Per Dozen

No. 14—14 in. $1.20
Weight 12½ Lbs. per Dozen
No. 16—16 in. 1.30
Weight 13½ Lbs. per Dozen

FLOOR HOOKS

These Hooks are made of Wrought Iron and have a Sharp, Coarse Thread.

Per Dozen

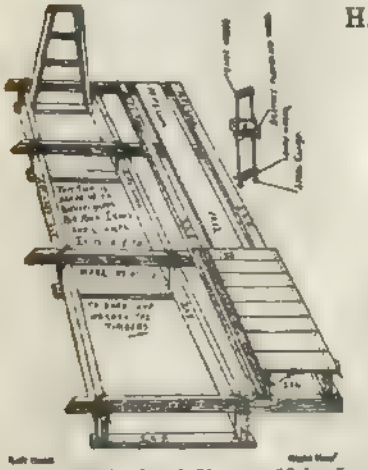
No. 1—⅝ in. Weight 8¾ Lbs. per Dozen $1.20
No. 2—¾ in.; Weight 12½ Lbs. per Dozen 1.40

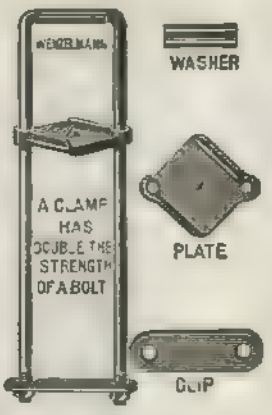
BARBED RAFTER NAILS

Per Pound

Used in Nailing Rafter Brackets to the Rafters in putting up Hay Carrier Track; ¼x2 in. Flat Head, Countersunk $0.15

HAY RACK BRACKETS AND CLAMPS





WENZELMAN PATENT

Lumber Required to Build a Rack 7x16 ft.

Have all 2 inch stuff dressed on both sides, and inch stuff on one side.

Two pieces, 2x8, 16 ft. for Bed Sills. Have Bed Sills 6 in. narrower in front than in rear.

Two pieces, 2x4, 14 ft. to cut in two for top Cross Pieces.

Six pieces, 2x4, 16 ft., one for Front Ladder, one for the four bottom Cross Sticks under the Bed Sills and four for the Top Longitudinal Pieces.

Two pieces, 2x6, 12 ft. to cut into 6 ft. lengths for Sides of Wheel Boxes. Spike from underneath the 2x4 longitudinal pieces.

Two pieces, 1x6, 16 ft. (fencing) to cut up to cover Wheel Boxes.

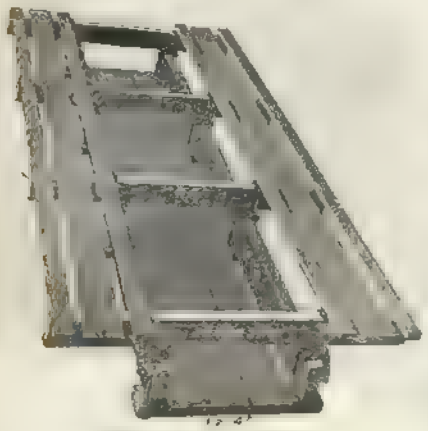
Two pieces, 1x12, 10 ft. to go in Front of Wheel Boxes to front end.

The above are for 14 in. Clamps, 16 in. take larger Cross Pieces or Bed Sills.

Per Set

No. 0—Eight Steel Clamps, 12 in. Long; Weight 12 Lbs. per Set $1.50
No. 1—Eight Steel Clamps, 14 in. Long; Weight 14 Lbs. per Set 1.50
No. 2—Eight Steel Clamps, 16 in. Long; Weight 16 Lbs. per Set 1.60
No. 3—Eight Steel Clamps, 18 in. Long; Weight 18 Lbs. per Set 1.70

One Set in a Box



Shows Rack Complete

Fig. 1623 Shows the Clamp which attaches Top Section to Cross Sills by means of Steel Bar "A."

Fig. 1621 Shows Irons without timbers.

Fig. 1622 Shows Lower Half of the Clamp which holds the Main Sill to the Lower Cross Piece.

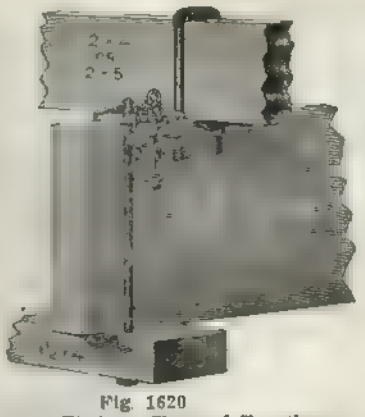


Fig. 1620 Shows Timbers Clamped Together

The Take-Down Clamp is made so as to enable the user to handle the rack in two sections; This is done by the removal of two Pins provided for the purpose of holding the Rack together; The fact that the Rack can be separated in two parts enables the user to place it on the Wagon or remove it without assistance. In addition to this, it gives you the Bottom Sills and Cross Pieces as a separate device for hauling Lumber, Wood, Sacked Grain, etc., and can also by the use of a set of stake irons be transformed into a hog rack.

MYERS TAKE DOWN

Per Dozen Sets

No. 6—For 8 in. Sill and 4 or 5 in. Cross Timbers; Weight 15 Lbs. per Set $26.50
No. 7—For 10 in. Sill and 6 in. Cross Timbers; Weight 19 Lbs. per Set 29.00

HAY CARRIERS FORKS

HARRIS SHORT HEAD

Each

No. 313—Double Harpoon; 15 in. Wide, 25 in. Long from Cross Bar to Point; Length Over-all 36 in.; Spring Steel Tines. $1.60
Weight 19 Lbs.

HARRIS LONG HEAD

Each

No. 315—Double Harpoon; 15 in. Wide, 31 in. Long from Cross Bar to Point; Length Over-all 42 in.; Spring Steel Tines. $2.00
Weight 20 Lbs.

ALFALFA

Each

No. 318—Double Harpoon; 23 in. Wide, 33 in. Long from Cross Bar to Point; Length Over-all 48 in.; Made of Steel, Extra Large and Strong $3.70
Weight 32½ Lbs.

LOCK LEVER

Each

No. 317—Double Harpoon; 16 in. Wide, 30 in. Long from Cross Bar to Point; Made of Special Steel ⅝x1¼ in., with Malleable Lever and Barbs; Bar being near Top of Fork, Gives Large Capacity $3.75
Weight 24 Lbs.

NELLIS

Each

No. 319—Single Harpoon; 36 in. Long from Latch to Point $3.00
Weight 11½ Lbs.

JACKSON DERRICK

Improved Pattern with Drop Forged Latch; Frame is Clear Seasoned Hardwood; Tines are Best Quality Spring Steel, 36 in. Long; Strongly Built, Full Bolted and Riveted. Lengths given are Spread of Tines, Measurement Over-all is 3 in. Longer.

Size, Ft.	3	3½	4	4½	5	5½	6
No. of Tines	4	4	4	4	6	6	6
Weight Each, Lbs.	45	48	52	57	65	68	70
Each	$15.00	15.00	16.50	18.00	21.00	24.00	27.00

HAY FORK PULLEYS

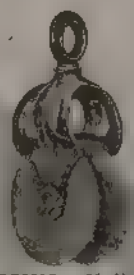
STEEL HAY FORK BLOCKS

7 in. Sheave; For ⅜ or ½ in. Wire Cable

The Shell is so constructed that the Wire can not crowd between it and the Sheave; the Sheave is equipped with Long Bearing Bushings, Swivel Hook is Drop Forged.

	Per Dozen
No. 31R—Roller Bearings	$18.00
No. 31P—Plain Bearings	15.00

Weight 96 Lbs. per Dozen



KNOT PASSING; Malleable Frame

Strong Malleable Iron Frame; Inside Flange to Protect Rope; 6 in. Hard Maple Wood Sheave; Loose Pin, Swivel Eye.

	Per Dozen
No. 122—Knot Passing	$4.60

Weight 35 Lbs. per Dozen

KNOT PASSING; Cast Frame

No. 126 is same as No. 122 Pulley in Design except the Frame is Cast Iron and has Cast Iron 6 in. Sheave in place of wood.

	Per Dozen
No. 126—Knot Passing	$4.60

Weight 44 Lbs. per Dozen

EXTRA QUALITY PULLEY

Intended for Extra Hard Use, 6 in. Hard Maple Sheave, Revolving on a Pipe Bushing, Heavy Malleable Iron Frame extending over Sheave to prevent Rope Cutting; Swivel Eye.

	Per Dozen
No. 137—Extra Quality	$7.00

Weight 40 Lbs. per Dozen

KNOT PASSING; STEEL

Has Steel Frame and Swivel Eye, 6 in Hard Maple Sheave, which Revolves on Turned Bushing; Held Rigid by a Bolt.

	Per Dozen
No. 130—Knot Passing	$4.00

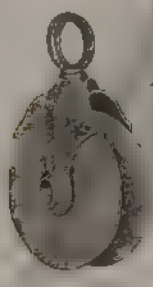
Weight 36 Lbs. per Dozen

ALL WOOD; REED PATTERN

Smooth Hard Maple Frame and 5 in. Hard Maple Sheave; Wrought Steel Yoke; Malleable Swivel Eye; Hollow Pipe Bushing.

	Per Dozen
No. 111—Reed Pattern	$4.00

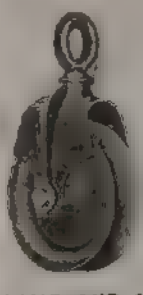
Weight 36 Lbs. per Dozen



Smooth Cast Iron Frame; 6 in. Hard Maple Sheave; Swivel Eye, Large Hollow Pin.

	Per Dozen
No. 114—Cast Iron Frame	$3.20

Weight 30 Lbs. per Dozen



IRON FRAME AND SHEAVE

Smooth Heavy Cast Iron Frame and 6 in. Cast Iron Sheave.

	Per Dozen
No. 115—Heavy Cast Iron Frame	$3.20

Weight 38 Lbs. per Dozen

STEEL FRAME

Flanged, Pressed Wrought Steel Frame; 6 in Hard Maple Sheave; Swivel Eye; Large Bushing.

	Per Dozen
No. 109—Steel Frame	$3.50

Weight 31 Lbs. per Dozen

EXTRA WOOD SHEAVES FOR HAY FORK PULLEYS

	Per Dozen
No. 77—1¾x⅜ in. Hard Maple	$1.20
No. 99—1¾x8x⅝ in. Hole; Hard Maple; For 1 in. Rope	$4.00

NEY SLING PULLEYS

SELF LOCKING

Per Pair

No. 329—For End Trip Slings; can be fitted with any style of Registering Head to work with any make of Carrier....$4.00

SELF LOCKING

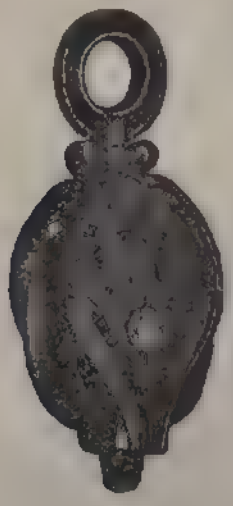
Per Pair

No. 300—Can be used in connection with nearly any style of Registering Head made $3.00

Special Register Heads can be mailed from Factory on request.

HAY FORK PULLEYS

Anti-Friction; Malleable Iron Shell and Sheave Steel Roller Bushing. Japanned; Turned Steel Pin; Will always run True



WITH SWIVEL RING SHACKLE

Per Dozen

No. 12—With 8x1⅛ in. Sheave, for Cable.....$20.00
Weight 90 Lbs. per Dozen

No. 10—With 5x1 in. Sheave, for Cable..... 15.00
Weight 75 Lbs. per Dozen

No. 1—With 5x1 in. Sheave, for Rope 12.00
Weight 75 Lbs. per Dozen

WITH SWIVEL HOOK

Per Dozen

No. 13—With 8x1⅛ in. Sheave, for Cable.. . . . . $20 00
Weight 95 Lbs. per Dozen

No. 11—With 5x1 in. Sheave, for Cable..... 15.00
Weight 80 Lbs. per Dozen

No. 3—With 5x1 in. Sheave, for Rope..... . ..... 12 00
Weight 80 Lbs. per Dozen

EIGHT DAY MARATHON AUTOMATIC ALARM CLOCKS

The following directions are packed with each Clock. Read them carefully

"Wind time and alarm side and be sure that switch on back of clock is turned toward the word "Alarm". Then turn the alarm indicator or red hand, as arrow indicates on dial, until it is directly under the hour hand. If the Alarm does not ring, the red hand may be turned to the hour at which alarm is desired to ring. It must be carefully observed that the red hand or indicator must pass by the hour hand once without the alarm ringing in order that the alarm will go off in twelve hours or less Should it ring when indicator is passing the hour hand, push in on button marked "Stop Alarm" on back of clock and alarm will stop ringing. Then make another revolution of the dial with the red alarm hand and set at the hour you wish the clock to alarm. If a regular time for ringing alarm is desired there need be no further setting of indicator, as alarm will ring off every 24 hours

To illustrate: The alarm is set at night to ring off at 6 o'clock in the morning. The alarm as expected rings at 6 o'clock in the morning. Now, if no further setting is done the following morning, or in 24 hours, the alarm will ring again and so on for seven days. If, however, you do not wish your alarm to ring on Sunday morning or any other morning, all it is necessary to do is to throw the switch on back of clock to the word "silent"

But if you wish the alarm to ring at the regular time on Monday morning, before retiring Sunday night, press button and then throw switch on back of clock to the word "Alarm"

If these instructions are observed, you will have no trouble with the Clock.

EIGHT-DAY MARATHON AUTOMATIC

The Eight-Day Marathon Automatic Alarm Clock is the latest creation in the manufacture of 20th Century Alarms; the Eight Day Marathon Modern Improved Movement, with Automatic Alarm feature is the Zenith of Perfection known to the art of Clock craftsmen; The noiseless beat (light tick) is especially desirable, and appeals strongly to the light sleeper; Only the highest grade of materials is used throughout the entire construction of the Clock; It has all Steel Cut Pinions with Extra Heavy Brass Plates and Wheels which are not used by any other Alarm Clock maker at the present time, Has 4 in. Best Metal Gong on back Arabic Dial, Red Alarm Hand Fancy Time Hands, Attractive Top Ornament, Brass Seamless Case, Beautifully Finished giving the Clock a very attractive appearance, unlike that of the ordinary low priced Alarm Clocks.

Height 8 in., Width 6¼ in.; Dial 4¼ in.

Dealer's Imprint (Name and Address) on Dial, Free of Charge, in Case Lots of 24 Clocks, Shipment at One Time, F. O. B. Factory

	Each
No. 8C—Burnished Copper Finish	$3 50
No. 8B—Lemon Brass Finish	3 50
No. 8S—Satin Silver Finish	3 50

Each Clock Packed in a Box 24 Clocks Packed in a Shipping Case, Weight 2¾ Lbs Each, Weight of Case 94 Lbs

For One-Day Clock, in this Style, see Page 2769, for Baby Clock, in this Style, see Page 2770.

JUMBO WIRELESS INTERMITTENT ALARM CLOCKS

Guarantee this Clock to give Perfect Satisfaction and Keep Correct Time for a Period of Two Years; If it Fails to do this, we will, upon its return to use, Transportation Charges Prepaid, Replace Same, Free of Charge

Easy to Read Dial

Loud Sounding Alarm

Cut Shows Full Size Clock

JUMBO WIRELESS

The Jumbo Wireless is the largest time-keeping Alarm Clock on the market, the very latest development in One-Day Time Intermittent Alarm Clocks, fitted with Special Hands easy reading Roman Time Dial, Arabic Alarm Dial, Beautiful Top Ornament Attractive design, Seamless Brass Case 4 in. Bell Metal Gong on back, Rings intermittently every 20 seconds for 15 minutes, The alarm can be silenced by Shut-Off Lever in upper left hand corner on the back of the clock, Can be furnished in the following Beautiful Finishes

Burnished Copper, Satin Silver, French Bronze, Lemon Brass, Oxidized Copper.

Height 8 in., Width 6¼ in.; Dial 4¼ in.

Dealer's Imprint (Name and Address) on Dial, Free of Charge, in Case Lots of 24 Clocks. Shipment at One Time, F. O. B. Factory

	Each
No. 3C —Burnished Copper Finish	$2 50
No. 3S —Satin Silver Finish	2 50
No. 3F —French Bronze Finish	2 50
No. 3B —Lemon Brass Finish	2 50
No. 3OC—Oxidized Copper Finish	2 50

Each Clock Packed in a Box, 24 Clocks Packed in a Shipping Case; Weight 2¼ Lbs. Each; Weight of Case, 86 Lbs

WIRELESS CALL ALARM CLOCKS

The Latest and Most Thoroughly Up-to-Date Alarm Clock, with Many New Features not found in others of its type

It will Wake the Dairyman, the Farmer, the Train Man, the Mechanic, the Business Man and even the School Boy, who hates to get up at all.

One-Day Time.
Alarm and Silent Switch.
Watch-Like Construction.
Dealer's Imprint on Dial when purchased in Case Lots.

Cut Shows Full Size Clock

WIRELESS CALL

Continuous or Intermittent Alarm

The alarm which has a Clear Silvery Note sounds on a large Gong on the back. While the tone is not harsh it is insistent, means business and will wake the most profound sleeper. The Movement is made of Solid Brass, with Highly Polished Bearings of Hard Pinion Steel; the Dial has Large, Plain Figures, which are easily read, even in a dim light.

Height 7⅛ in., Width 5¼ in.; Dial 4½ in.

Dealer's Imprint (Name and Address) on Dial, Free of Charge, in Case Lots of 24 Clocks, Shipment at One Time, F. O. B. Factory

	Each		Each
No. 5C —Burnished Copper Finish	$2.50	No. 5B —Lemon Brass Finish	$2.50
No. 5F —French Bronze Finish	2.50	No. 5OC—Oxidized Copper Finish	2.50
No. 5N —Nickel Finish	2.50	No. 5S —Satin Silver Finish	2.50

Each Clock Packed in a Box, 24 Clocks Packed in a Shipping Case, Weight 17⅜ Lbs. Each, Weight of Case, 86 Lbs.

For Convenience, Safety and Economy in shipping, we advise the Dealer to buy these Clocks in Case Lots, with his Name and Address on the Dial

For Baby Wireless Call, see Page 2770

THE WIRELESS INTERMITTENT ALARM CLOCKS

We Guarantee this Clock to give Perfect Satisfaction and Keep Correct Time for a Period of Two Years; If it Fails to do this, we will, upon its return to us, Transportation Charges Prepaid, Replace Same, Free of Charge

Cut Shows Full Size Clock

THE WIRELESS

The Wireless Alarm Clock is a new creation; a distinctive, extra high grade Clock, especially suited to the demand for dependable Alarm Clocks the Finish of these Clocks is distinctive and exclusive; They are not placed in competition with the common Nickel Finished, low grade Alarms, and this makes it possible to retail these goods at a fair profit, the material throughout is the best obtainable, and the Two-Year Guarantee absolutely assures quality in every detail of construction.

Intermittent Alarm; Height 6¾ in., Depth 3¼ in.; 4½ in. White Dial; Heavy Seamless Case, Assorted Finishes, Dust-Proof, Plain Rim; Fancy Stationary Handle; Alarms Intermittently every 20 seconds for 15 minutes on 4 in Bell Metal Gong on back; Shut-Off Switch on top; Easy Running and Long Wearing Escapement; Finely Tempered and Polished Spring

Dealer's Imprint (Name and Address) on Dial, Free of Charge. in Case Lots of 50 Clocks, Shipment at One Time, F. O. B. Factory

	Each
No. 2C —Burnished Copper Finish	$2.00
No. 2F —French Bronze Finish	2.00
No. 2B —Lemon Brass Finish	2.00
No. 2OC—Oxidized Copper Finish	2.00
No. 2S —Satin Silver Finish	2.00

Each Clock Packed in a Box; 50 Clocks Packed in a Shipping Case; Weight 1¾ Lbs. Each; Weight of Case, 110 Lbs.

JUNIOR WIRELESS ALARM CLOCKS

Cut Shows Full Size Clock

The Junior Wireless and Excello are the only Alarm Clocks made with Porcelain Dials, same as in high grade Watches

INTERMITTENT ALARM

Porcelain Dial

The Junior Wireless is one of the most pleasing Alarm Clocks of Medium Size that has ever been made, the Design is new and refined; the **Porcelain Dial** is plainly marked with large, clear Figures, which are easily read even in a dim light; the Alarm rings on large Gong on the back of Clock and has a rich, musical tone which never fails to awaken the sleeper

Height 5 in., Width 4 in.; 2½ in. Porcelain Dial; Fitted with "Alarm" or "Silent" Switch

	Each
No. 4B —Lemon Brass Finish	$2 50
No. 4C —Burnished Copper Finish	2 50
No. 4FB—French Bronze Finish	2 50
No. 4N —Nickel Plated Finish.	2 50
No. 4OC—Oxidized Copper Finish..	2 50
No. 4S —Satin Silver Finish.....	2.50

One in a Box; Weight 10 Oz. Each
24 in a Case; Weight 48 Lbs. per Case

EXCELLO ALARM CLOCKS

Cut Shows Full Size Clock

CONTINUOUS ALARM

Porcelain Dial

The Excello is a "Smaller Brother" to the Junior Wireless and is identical in appearance, the only difference being in the Size and the Kind of Alarm; the Excello has a **Continuous Alarm**, instead of an Intermittent Alarm; This Clock is bound to become very popular as it is High Grade in every respect and Moderate in Price

Height 4¼ in., Width 3¼ in.; 2 in. Porcelain Dial; Fitted with "Alarm" or "Silent" Switch

	Each
No. 6B —Lemon Brass Finish.....	$2.00
No. 6C —Burnished Copper Finish.....	2 00
No. 6FB—French Bronze Finish.....	2.00
No. 6N —Nickel Plated Finish.....	2.00
No. 6OC—Oxidized Copper Finish.....	2.00
No. 6S —Satin Silver Finish.....	2.00

One in a Box; Weight 8 Oz. Each
24 in a Case; Weight 45 Lbs. per Case

BABY ALARM CLOCKS

These Baby Time Pieces have all the good Features of the large Clocks and are becoming more popular all the time on account of their small size and classy appearance; They are all Guaranteed

Cut Shows Full Size Clock

We Guarantee these Clocks to give Perfect Satisfaction and Keep Correct Time for a Period of Two Years; if they Fail to do this, we will, upon return to us, Transportation Charges Prepaid, Replace Same, Free of Charge

BABY WIRELESS INTERMITTENT

Intermittent Light Sounding Alarm; Height 3½ in., Depth 2 in., White Dial, 2 in. Diam. Heavy Seamless Case, Assorted Finishes, Dust Proof, Plain Rim, Fancy Stationary Handle. Alarms Intermittently every 20 seconds for 5 minutes on 2 in. metal Gong on back; Shut-Off Switch on top, Easy Running and Long Wearing Escapement. Finely Tempered and Polished Spring.

	Each		Each
No. 1C —Burnished Copper Finish	$2.00	No. 1B —Lemon Brass Finish	$2 00
No. 1FB—French Bronze Finish	2.00	No. 10C—Oxidized Copper Finish	2 00
		No. 1S —Satin Silver Finish	2 00

One in a Box; Weight ½ Lb. Each; 50 in a Case; Weight 50 Lbs. per Case

Cut Shows Full Size Clock

THE BABY CALL INTERMITTENT

The Baby Call Clock is of attractive appearance and has dependable time-keeping qualities, the Winding Keys are of generous size and are easily grasped, the Dial is clearly marked and can be read at considerable distance, the Alarm Gong is on the back and a Switch for setting the Clock to 'Alarm' or 'Silent' is on top at the right; There is also a Switch on top at the left which sets the Alarm either long or intermittently, it will ring continuously for 5 minutes or intermittently for periods of 20 seconds, the Alarm can be stopped when desired by turning the Switch to "Silent". Height 3½ in., Depth 1¾ in.; White Dial, 2½ in. Diam.; Heavy Seamless, Dust-Proof Case.

	Each		Each
No. 9C —Burnished Copper Finish	$3.00	No. 9B —Lemon Brass Finish	$3 00
No. 9F —French Bronze Finish	3.00	No. 9OC—Oxidized Copper Finish	3 00
No. 9N —Nickel Plated Finish	3.00	No. 9S —Satin Silver Finish	3 00

One in a Box; Weight ½ Lb. Each; 50 in a Case; Weight 50 Lbs. per Case

WIZARD ALARM CLOCKS

With Intermittent Alarm

We Guarantee this Clock to give Satisfaction and Keep Correct Time for a Period of One Year

The Wizard is a Popular Priced Clock, with many of the features of the higher priced Time Pieces. It is substantially made and its time-keeping qualities are unsurpassed; Accuracy and efficiency are combined in its construction

Cut Shows Full Size Clock

THE WIZARD

Wizard Alarm Clocks are high grade in every respect, and sold at moderate cost. They are accurate and dependable and embody in their construction and adjustment every detail for the making of a satisfactory Clock.

It meets the demand for high grade, Nickel Plated Clocks, at a popular price and meets the competition of all Nickel Finished Clocks of Standard Grade. Height 6⅛ in., Depth 3½ in., 4½ in. White Dial., Seamless Brass Case, Full Nickel Plated, 4 in. Bell Metal Gong on back; One-Day Alarm, Rings Intermittently every 30 seconds for 10 minutes, Fitted with Silent Switch.

Dealer's Imprint (Name and Address) on Dial, Free of Charge, in Case Lots of 50 Clocks, Shipment at One Time, F. O. B. Factory

	Each
No. 95—Nickel Plated Finish	$2 50

One in a Pasteboard Box; Weight 1¾ Lbs. Each; 50 in a Case; Weight 110 Lbs. per Case

Advertising Every Merchant who is interested in advertising his business and building up his Trade should take advantage of every opportunity of keeping his name and business in the minds of his customers. We believe that having your name and business on these Clocks will prove a good means of stimulating trade, not only on Clocks, but on other lines as well.

AEROGRAM ALARM CLOCKS

Guaranteed for One Year

The Aerogram Alarm Clock fills every requirement for a low priced, reliable Time Piece; the quality and workmanship are all that can be desired. This Clock is very popular and should not be compared with cheap, unreliable goods with which the market is flooded; the Alarm is always dependable and it will arouse the soundest sleeper; It rings continuously for a long time and can be shut-off entirely by moving the Lever; It is of good size and nicely Finished; the Winding Keys are easily operated.

Cut Shows Full Size Clock

THE AEROGRAM

The Dust-Proof Seamless Case and 30 Hour Winding Features are found only in The Aerogram, which is Fully Guaranteed for One Year

Height 6½ in., Depth 2⅜ in., 4 in. White Dial, with large, plain Figures and Markings. Dust Proof Heavy Seamless Brass Case, Nickel Plated; Drop Handle; Switch for Stopping Alarm.

Dealer's Imprint (Name and Address) on Dial, Free of Charge, in Case Lots of 50 Clocks, Shipment at One Time, F. O. B. Factory

	Each
No. 120—Nickel Plated Finish	$1.50

One in a Box; Weight 1¼ Lbs. Each; 50 in a Case; Weight 80 Lbs. per Case

Advertising. Every Merchant who is interested in advertising his business and building up his Trade should take advantage of every opportunity of keeping his name and business in the minds of his customers. We believe that having your name and business on these Clocks will prove a good means of stimulating trade, not only on Clocks, but on other lines as well.

ADJUSTABLE IRON PLANES

The difference between the **Zenith Special** or **Stanley Bed Rock** and the **Standard Zenith** or **Bailey** is in the **Adjustable Frog** which may be adjusted either forward or backward without removing the Lever and Cutter. The Cutter, Frog and Bottom are so designed, machined and fitted that they are practically one solid piece of metal thus preventing any vibration. The Zenith Special and Bed Rock are fitted with beautiful Handles and Knobs stained Rosewood.

All Planes on this page are furnished in Smooth or Corrugated Bottom; the letter "C" designates Corrugated Bottom; Corrugated Bottom Planes are the most popular because they reduce the friction.

SMOOTH BOTTOM

CORRUGATED BOTTOM

ZENITH SPECIAL SMOOTH PLANES

	Each		Each
No. Z602 — 7 in. Long; 1⅝ in. Cut; Weight 2½ Lbs.	$3.00	No. Z602C — 7 in. Long; 1⅝ in. Cut; Weight 2⅝ Lbs.	$3.00
No. Z603 — 8 in. Long; 1⅝ in. Cut; Weight 3 Lbs.	3.30	No. Z603C — 8 in. Long; 1⅝ in. Cut; Weight 3¼ Lbs.	3.30
No. Z604 — 9 in. Long; 2 in. Cut; Weight 3⅝ Lbs.	3.60	No. Z604C — 9 in. Long; 2 in. Cut; Weight 3½ Lbs.	3.60
No. Z604½—10 in. Long; 2⅜ in. Cut; Weight 4¾ Lbs.	4.25	No. Z604½C—10 in. Long; 2⅜ in. Cut; Weight 3⅝ Lbs.	4.25

STANLEY BED ROCK SMOOTH PLANES

	Each		Each
No. 602 — 7 in. Long; 1⅝ in. Cut; Weight 2½ Lbs.	$3.00	No. 602C — 7 in. Long; 1⅝ in. Cut; Weight 2¼ Lbs.	$3.00
No. 603 — 8 in. Long; 1⅝ in. Cut; Weight 3 Lbs.	3.30	No. 603C — 8 in. Long, 1⅝ in. Cut; Weight 3 Lbs.	3.30
No. 604 — 9 in. Long; 2 in. Cut; Weight 3½ Lbs.	3.60	No. 604C — 9 in. Long 2 in. Cut; Weight 3½ Lbs.	3.60
No. 604½—10 in. Long; 2⅜ in. Cut; Weight 4½ Lbs.	4.25	No. 604½C—10 in. Long; 2⅜ in. Cut; Weight 4½ Lbs.	4.25

ZENITH SMOOTH PLANES

	Each		Each
No. Z2 — 7 in. Long; 1⅝ in. Cut; Weight 2½ Lbs.	$2.75	No. Z2C — 7 in. Long, 1⅝ in. Cut, Weight 2⅝ Lbs.	$2.75
No. Z3 — 8 in. Long; 1⅝ in. Cut; Weight 3 Lbs.	3.00	No. Z3C — 8 in. Long, 1⅝ in. Cut; Weight 3¼ Lbs.	3.00
No. Z4 — 9 in. Long; 2 in. Cut; Weight 3⅝ Lbs.	3.25	No. Z4C — 9 in. Long, 2 in. Cut; Weight 3½ Lbs.	3.25
No. Z4½ —10 in. Long; 2⅜ in. Cut; Weight 4¾ Lbs.	3.75	No. Z4½C —10 in. Long, 2⅜ in. Cut; Weight 4¾ Lbs.	3.75

BAILEY SMOOTH PLANES

	Each		Each
No. 1 — 6½ in. Long; 1¼ in. Cut; Weight 1¾ Lbs.	$2.75		
No. 2 — 7 in. Long; 1⅝ in. Cut; Weight 2¼ Lbs.	2.75	No. 2C — 7 in. Long; 1⅝ in. Cut; Weight 2⅝ Lbs.	$2.75
No. 3 — 8 in. Long; 1⅝ in. Cut; Weight 3¼ Lbs.	3.00	No. 3C — 8 in. Long, 1⅝ in. Cut, Weight 3¼ Lbs.	3.00
No. 4 — 9 in. Long; 2 in. Cut; Weight 3½ Lbs.	3.25	No. 4C — 9 in. Long 2 in. Cut, Weight 3½ Lbs.	3.25
No. 4½ —10 in. Long; 2⅜ in. Cut; Weight 4¾ Lbs.	3.75	No. 4½C —10 in. Long, 2⅜ in. Cut, Weight 4¾ Lbs.	3.75

SMOOTH BOTTOM

CORRUGATED BOTTOM

ZENITH SPECIAL JACK PLANES

	Each		Each
No. Z605 —14 in. Long; 2 in. Cut; Weight 4½ Lbs.	$4.25	No. Z605C —14 in. Long; 2 in. Cut; Weight 4¾ Lbs.	$4.25
No. Z605½—15 in. Long; 2¼ in. Cut, Weight 6½ Lbs.	4.60	No. Z605½C—15 in. Long; 2¼ in. Cut; Weight 5½ Lbs.	4.60

STANLEY BED ROCK JACK PLANES

	Each		Each
No. 605 —14 in. Long; 2 in. Cut; Weight 4½ Lbs.	$4.25	No. 605C —14 in. Long; 2 in. Cut; Weight 4½ Lbs.	$4.25
No. 605½—15 in. Long; 2¼ in. Cut; Weight 6 Lbs.	4.60	No. 605½C—15 in. Long, 2¼ in. Cut; Weight 6 Lbs.	4.60

ZENITH JACK PLANES

	Each		Each
No. Z5 —14 in. Long; 2 in. Cut; Weight 4½ Lbs.	$3.75	No. Z5C —14 in. Long 2 in. Cut Weight 4½ Lbs.	$3.75
No. Z5½ —15 in. Long; 2¼ in. Cut, Weight 5½ Lbs.	4.20	No. Z5½C —15 in. Long 2¼ in. Cut Weight 5½ Lbs.	4.20

BAILEY JACK PLANES

	Each		Each
No. 5 —14 in. Long; 2 in. Cut; Weight 4⅝ Lbs.	3.75	No. 5C —14 in. Long, 2 in. Cut, Weight 4⅝ Lbs.	$3.75
No. 5½ —15 in. Long; 2¼ in. Cut; Weight 6 Lbs.	4.20	No. 5½C —15 in. Long, 2¼ in. Cut, Weight 6 Lbs.	4.20

ZENITH SPECIAL FORE PLANES

	Each		Each
No. Z606 —18 in. Long; 2⅜ in. Cut; Weight 7 Lbs.	$5.25	No. Z606C —18 in. Long; 2⅜ in. Cut; Weight 7 Lbs.	$5.25

BED ROCK FORE PLANES

	Each		Each
No. 606 —18 in. Long; 2⅜ in. Cut; Weight 7¼ Lbs.	$5.25	No. 606C —18 in. Long; 2⅜ in. Cut; Weight 7¼ Lbs.	$5.25

ZENITH FORE PLANES

	Each		Each
No. Z6 —18 in. Long; 2⅜ in. Cut, Weight 7 Lbs.	$4.75	No. Z6C —18 in. Long; 2⅜ in. Cut; Weight 7 Lbs.	$4.75

BAILEY FORE PLANES

	Each		Each
No. 6 —18 in. Long, 2⅜ in. Cut; Weight 7¼ Lbs.	$4.75	No. 6C —18 in. Long; 2⅜ in. Cut; Weight 7¼ Lbs.	$4.75

ZENITH SPECIAL JOINTER PLANES

	Each		Each
No. Z607 —22 in. Long; 2⅜ in. Cut; Weight 8½ Lbs.	$6.10	No. Z607C —22 in. Long; 2⅜ in. Cut; Weight 8½ Lbs.	$6.10
No. Z608 —24 in. Long, 2⅜ in. Cut; Weight 10 Lbs.	7.25	No. Z608C —24 in. Long; 2⅜ in. Cut; Weight 10 Lbs.	7.25

BED ROCK JOINTER PLANES

	Each		Each
No. 607 —22 in. Long; 2⅜ in. Cut; Weight 7¾ Lbs.	$6.10	No. 607C —22 in. Long; 2⅜ in. Cut, Weight 7¾ Lbs.	$6.10
No. 608 —24 in. Long; 2⅜ in. Cut; Weight 9 Lbs.	7.25	No. 608C —24 in. Long; 2⅜ in. Cut; Weight 9 Lbs.	7.25

ZENITH JOINTER PLANES

	Each		Each
No. Z7 —22 in. Long; 2⅜ in. Cut; Weight 8½ Lbs.	$5.50	No. Z7C —22 in. Long; 2⅜ in. Cut; Weight 8½ Lbs.	$5.50
No. Z8 —24 in. Long; 2 ⅜in. Cut; Weight 10 Lbs.	6.50	No. Z8C —24 in. Long; 2⅜ in. Cut; Weight 10 Lbs.	6.50

BAILEY JOINTER PLANES

	Each		Each
No. 7 —22 in. Long; 2⅜ in. Cut; Weight 7½ Lbs.	$5.50	No. 7C —22 in. Long; 2⅜ in. Cut; Weight 7½ Lbs.	$5.50
No. 8 —24 in. Long, 2⅜ in. Cut; Weight 9 Lbs.	6.50	No. 8C —24 in. Long; 2⅜ in. Cut; Weight 9 Lbs.	6.50

All Above, One in a Box

ADJUSTABLE WOOD PLANES

A Smooth Plane is for Finishing or Smoothing off flat surfaces where the uneven spots are not large. It's short length permits it to locate these irregularities and leave a perfectly smooth surface when finished. A Jack Plane is used to true up the edges of a board in the rough and prepare it for the Fore or Jointer. A Fore Plane is a Short Jointer and being lighter is preferred by some workmen to the Jointer Plane

A Jointer is a Finishing Plane for large surfaces and is used to true up the edges of the boards so that they can be closely fitted together.

ZENITH SMOOTH, WITHOUT HANDLE

		Each
No. Z21— 7	in. Long; 1⅝ in. Cut; Weight 2¼ Lbs ..	$2 00
No. Z22— 8	in. Long; 1⅝ in. Cut; Weight 2½ Lbs	2 00
No. Z23— 9	in. Long; 1⅝ in. Cut; Weight 2⅝ Lbs.	2 00
No. Z24— 8	in. Long; 2 in. Cut; Weight 3 Lbs.	2 00

STANLEY SMOOTH, WITHOUT HANDLE

		Each
No. 22— 8	in. Long; 1⅝ in. Cut; Weight 2½ Lbs..	$1 50
No. 23— 9	in. Long; 1⅝ in. Cut; Weight 2⅝ Lbs..	1 50
No. 24— 8	in. Long; 2 in. Cut; Weight 2⅞ Lbs....	1.50

STANLEY BLOCK

		Each
No. 25— 9½	in. Long; 1⅝ in. Cut; Weight 2⅝ Lbs.....	$1 50

ZENITH JACK

		Each
No. Z26—15	in. Long; 2 in. Cut; Weight 4 Lbs...	$2 25
No. Z27—15	in. Long; 2⅛ in. Cut; Weight 4½ Lbs..	2 50

ZENITH FORE

		Each
No. Z28—18	in. Long; 2⅜ in. Cut; Weight 5⅝ Lbs....	$2 75
No. Z29—20	in. Long; 2⅜ in. Cut; Weight 5⅝ Lbs....	2.75

ZENITH JOINTER

		Each
No. Z30—22	in. Long; 2⅜ in. Cut; Weight 6 Lbs.....	$3.00
No. Z31—24	in. Long; 2⅜ in. Cut; Weight 6½ Lbs.....	3.00
No. Z32—26	in. Long; 2⅜ in. Cut; Weight 7¾ Lbs.....	3.25
No. Z33 28	in. Long; 2⅜ in. Cut; Weight 7¾ Lbs.....	3.25
No. Z34—30	in. Long; 2⅜ in. Cut; Weight 9 Lbs.....	3.50

ZENITH HANDLED SMOOTH

		Each
No. Z35— 9	in. Long; 2 in. Cut; Weight 3⅝ Lbs.	$2 50
No. Z36—10	in. Long; 2⅜ in. Cut; Weight 4 Lbs.	2 75

STANLEY HANDLED SMOOTH

		Each
No. 35— 9	in. Long; 2 in. Cut; Weight 3¼ Lbs.	$1 90
No. 36—10	in. Long; 2⅜ in. Cut; Weight 4 Lbs	2.05

JENNY SMOOTH

		Each
No. 37—13	in. Long; 2⅝ in. Cut; Weight 4⅞ Lbs	$2 20

STANLEY JACK

		Each
No. 26	—15 in. Long; 2 in. Cut, Weight 4 Lbs.	$1 65
No. 27	—15 in. Long; 2⅛ in. Cut; Weight 4¼ Lbs.	1.90
No. 27½	—15 in. Long; 2¼ in. Cut; Weight 4¾ Lbs.	1.90

STANLEY FORE

		Each
No. 28	—18 in. Long; 2⅜ in. Cut; Weight 5½ Lbs.	$2.05
No. 29	—20 in. Long; 2⅜ in. Cut; Weight 6⅛ Lbs.	2.05

STANLEY JOINTER

		Each
No. 30	—22 in. Long; 2⅜ in. Cut; Weight 6 Lbs.	$2.20
No. 31	—24 in. Long; 2⅜ in. Cut; Weight 6½ Lbs.	2.20
No. 32	—26 in. Long; 2⅜ in. Cut; Weight 7¼ Lbs.	2.40
No. 33	—28 in. Long; 2⅜ in. Cut, Weight 7¾ Lbs.	2.40
No. 34	—30 in. Long; 2⅜ in. Cut; Weight 8½ Lbs.	2.60

STANLEY PATENT WOOD PLANES

SMOOTH, WITHOUT HANDLE

		Each
No. 122	-8 in. Long; 1¾ in. Cut; Weight 2¼ Lbs....	$1.10

HANDLED SMOOTH

		Each
No. 135	—10 in. Long; 2⅛ in. Cut; Weight 3 Lbs	$1.50

		Each
No. 127	—Jack; 15 in. Long; 2⅛ in. Cut; Weight 3¾ Lbs.	$1.50
No. 129	—Fore; 20 in. Long; 2⅜ in. Cut; Weight 5 Lbs.	1.65
No. 132	—Jointer; 26 in. Long; 2⅜ in. Cut; Weight 6¼ Lbs.	1.90

STEEL PLANES

SMOOTH AND JACK

Wrought Steel Bottom; Polished; Inside is Japanned; Mahogany Handle and Knob; English Steel Irons, Polished and Tempered; Lever Adjustment; Greatest strength and minimum weight are combined.

STANLEY SMOOTH

		Each
No. 104	—9 in. Long; 2⅜ in. Cut; Weight 3 Lbs.	$2.05

STANLEY JACK

		Each
No. 105	—14 in. Long; 2⅜ in. Cut; Weight 3¾ Lbs.	$2.60

SPECIAL PLANES

CARRIAGE MAKERS' RABBET

Patent Side Adjustment; Polished Trimmings; East India Mahogany Handle and Knob, Corrugated Bottom; 2⅛ in. Cut.

ZENITH

		Each
No. Z10½C	— 9 in. Long; Wt. 3¾ Lbs.	$4 30
No. Z10C	—13 in. Long; Wt. 4¾ Lbs.	5.20

STANLEY

		Each
No. 10	—13 in. Long.	$3.30
No. 10½	— 9 in. Long.	3.75

Average Weight 4 Lbs.

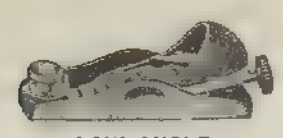
All, One in a Box

IMPROVED SCRUB PLANES

This Tool has a Single Iron, with the Cutting Edge rounded, and is particularly adapted for roughing down work before using a Jack or other Plane; Japanned Iron Stock.

		Each
No. 40	—9½ in. Long; 1¾ in. Cut; Weight 2¼ Lbs.	$1.10
No. 40½	—10½ in. Long; 1½ in. Cut; Weight 2¼ Lbs	1.50

BLOCK PLANES



LOW ANGLE

The Cutters are set at a low angle, making it easy to work across the grain; Nickel Plated Trimmings.

Each

No. Z60—6 in. Long; 1⅝ in. Cut; Weight 1¾ Lbs. ... $1.90

No. Z65—7 in. Long; 1⅝ in. Cut; Weight 2 Lbs. ... 2 10

STANLEY

Each

No. 60—6 in. Long, 1⅝ in. Cut; Weight 1⅝ Lbs. ... $1.90

No. 65—7 in. Long; 1⅝ in. Cut; Weight 1⅝ Lbs. ... 2 10

NON-ADJUSTABLE

Has a Wheel instead of a Cam in the Lever; Polished Bottom and Sides; Japanned Cap and Inside; Rosewood Knob.

Each

No. Z110—7⅛ in. Long; 1⅝ in Cut Weight 1⅛ Lbs. ... $0.75

STANLEY

Each

No. 110—7⅛ in. Long; 1⅝ in. Cut Weight 1⅝ Lbs ... $0.75

DOUBLE ENDER

Two Slots and Two Cutter Seats; By putting the Cutter in the End Slot you can work into close corners.

Each

No. Z130—7⅝ in. Long; 1⅝ in. Cut; Weight 1⅞ Lbs. ... $1.05

STANLEY

Each

No. 130—8 in. Long; 1⅝ in. Cut; Weight 1⅝ Lbs. ... $1.05

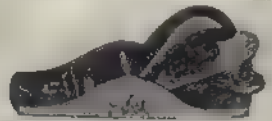
ADJUSTABLE, DOUBLE END

By Reversing the Cutter Seat and placing the Cap and Cutter in the End Slot, it can be used as a Bull Nose Plane to work into corners, etc.

Japanned Cap and Trimmings, Polished Adjusting Wheel, Rosewood Knob.

Each

No. 131—8 in. Long; 1⅝ in. Cut; Weight 1⅝ Lbs. ... $1.50



ADJUSTABLE

Polished Bottom and Sides; Inside and Cap Japanned

Each

No. Z103—5½ in. Long; 1⅝ in. Cut; Weight 1 Lb. ... $0.75

STANLEY

Each

No. 103—5½ in. Long; 1⅝ in. Cut; Weight ¾ Lbs. ... $0 75

ROSEWOOD HANDLE

Polished Body, Cap and Inside Japanned; Brass Adjusting Screw

Each

No. Z9¾—6 in. Long; 1⅝ in. Cut; Weight 1¾ Lbs. ... $1.85

No. Z15½—7 in. Long; 1⅝ in. Cut; Weight 2 Lbs. ... 1.95

STANLEY

Each

No. 9¾—6 in. Long; 1⅝ in. Cut; Weight 1⅝ Lbs. ... $1.85

ADJUSTABLE

Polished Bottom and Sides; Japanned Inside; Brass Adjusting Screw; Nickel Plated Trimmings.

Each

No. Z16—6 in. Long; 1⅝ in. Cut; Weight 1⅝ Lbs. ... $1 75

No. Z17—7 in. Long; 1⅝ in. Cut; Weight 2 Lbs. ... 1.85

STANLEY

Each

No. 16—6 in. Long; 1⅝ in. Cut; Weight 1½ Lbs. ... $1.75

No. 17—7 in. Long; 1⅝ in. Cut; Weight 1½ Lbs. ... 1.85

ADJUSTABLE

Polished Bottom and Sides; Inside and Cap Japanned

Each

No. Z220—Screw Adjustment; 7⅛ in. Long; 1⅝ in. Cut; Weight 1⅞ Lbs. $1.05

STANLEY

Each

No. 220—7⅛ in. Long; 1⅝ in. Cut, Weight 1⅞ Lbs. ... $1.05

NON-ADJUSTABLE

Polished Bottom; Balance Japanned; Used by Toy Dealers and Makers of Boys' Tool Chests.

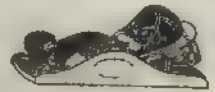
Each

No. Z100—3½ in. Long; 1 in. Cut, Weight ¾ Lb. ... $0.35

STANLEY

Each

No. 100—3½ in. Long; 1 in. Cut; Weight 1¼ Lbs. ... $0.35



ADJUSTABLE

Polished Bottom and Sides; Japanned Cap and Inside; Rosewood Knob

Each

No. 203—5½ in. Long; 1⅝ in. Cut; Weight 1 Lb. Each ... $0.65

All, One in a Box

KNUCKLE JOINT

Nickel Plated Cap and Trimmings; the Knuckle Joint in the Cap makes it a Lever to clamp the Cutter in it's seat.

Each

No. Z18—6 in. Long; 1⅝ in. Cut; Weight 1¾ Lbs. ... $1.85

No. Z19—7 in. Long; 1⅝ in. Cut; Weight 2 Lbs. ... 1 95

STANLEY

Each

No. 18—6 in. Long; 1⅝ in. Cut; Weight 1½ Lbs ... $1 85

No. 19—7 in. Long; 1⅝ in Cut; Weight 1½ Lbs ... 1.95

ADJUSTABLE

Polished Trimmings; Brass Adjusting Screw

Each

No. Z9½—6 in. Long; 1⅝ in. Cut; Weight 1⅝ Lbs. ... $1.70

No. Z15—7 in. Long; 1⅝ in. Cut; Weight 1⅝ Lbs. ... 1.80

STANLEY

Each

No. 9½—6 in. Long; 1⅝ in. Cut; Weight 1½ Lbs. ... $1.70

No. 15—7 in. Long; 1⅝ in. Cut; Weight 1½ Lbs. ... 1.80

NON-ADJUSTABLE

Has a Wheel instead of a Cam in the Lever Bottom is Polished; Balance Japanned

Each

No. Z102—5½ in. Long; 1⅝ in. Cut; Weight 1 Lb. ... $0.55

STANLEY

Each

No. 102—5½ in. Long, 1⅝ in. Cut; Weight ¾ Lbs. ... .55

RABBET AND BLOCK

Detachable Side changes Tool from Block to Rabbet and vice versa; Cutter is set obliquely

Japanned Inside; Polished Bottom and Sides; Nickel Plated Cap; Polished Steel Adjusting Screw and Lever; Black Walnut Knob.

Each

No. 140—7 in. Long; 1⅝ in. Cut; Weight 1¾ Lbs. ... $1.40

ADJUSTABLE

Polished Bottom and Sides; Inside and Cap Japanned

Each

No. Z207—Lever Adjustment; 7⅛ in. Long; 1⅝ in. Cut; Weight 1⅞ Lbs. $1.00

FANCY PLANES

ZENITH BULL NOSE RABBET

For working close to a corner; Japanned Iron Stock, Polished Steel Adjusting Screw.

Each

No. Z75—4 in. Long; 1 in. Cut, Weight ⅝ Lbs. $0.55

STANLEY

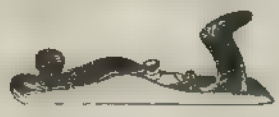
No. 75—4 in. Long; 1 in. Cut; Weight ⅝ Lbs. ..... .40

BELT MAKERS'

For Paring, Scarfing or Chamfering the laps of a Belt, before Splicing them together

Each

No. 11—Cast Steel, Japanned; Polished Tempered Bit; 2⅜ in. Cut; Brass Adjusting Screw; 11 in. Maple Handle, Length Over-all 9½ in.; Weight 3½ Lbs. $2 20



LOW ANGLE

Especially adapted for use in cutting across the grain on heavy work, where more power is required than can be obtained by the use of the ordinary Block Plane; This Plane is fitted with Patent Adjustable Throat, which enables the user to work equally well on hard or soft woods.

Each

No. 62—14 in. Long; 2 in. Cut; Weight 3⅞ Lbs. $2.85

ZENITH IMPROVED CIRCULAR

By means of the Graduated Scale on the Gears the face can be set to work an Arc of the same Circle, either Convex or Concave; Japanned Body and Handle, Brass Adjusting Screw; All other parts Polished.

Each

No. Z113—10¼ in. Long; 1¾ in. Cut, Weight 4 Lbs. $5.00

STANLEY

No. 113—10½ in. Long; 1¾ in. Cut; Weight 4 Lbs. 3 00

ZENITH WOOD WORKERS' ROUTER

Have Screw Adjustment; Nickel Plated Finish, Wood Handles; Each Complete with Two Cutters, ¼ and ⅛ in., Used for Routing Mortises, Smoothing Bottoms of Grooves, etc.

Each

No. Z71—Open Throat; Length 8 in., Allows Each Shavings to Clear more readily; Weight 2 Lbs. $2.50

STANLEY OPEN THROAT

No. 71—1⅝ in. Opening; ⅜ in. Bit Shank; Weight 2½ Lbs 2 05

Each

No. Z71½—Closed Throat; Length 8 in.; Weight 2½ Lbs. $2.00

STANLEY CLOSED THROAT

No. 71½—Size of Opening 2x1⅝ in; Weight 2 Lbs. 1.65

DUPLEX RABBET AND FILLETSTER

The Arm for Fence screws into either side of stock, making a Right or Left Hand Fillister with Depth Gauge and Spur, for working across the grain; Inserting the Cutter in the Forward Seat makes a Bull Nose Rabbet.

Each

No. Z78—8½ in. Long; 1½ in. Cut, Weight 3½ Lbs. $2.70

STANLEY

No. 78—8½ in. Long; 1½ in. Cut; Weight 3 Lbs. 1.65

ZENITH RABBET

Will lie perfectly flat on either side; Can be used with right or left hand; Fitted with Depth Gauge; Body and Handle are Japanned; Polished Set Screw

Each

No. Z182—8 in. Long; 1 in. Cutter.. $1.90
No. Z181—8 in. Long; 1¼ in. Cutter.. 1.90
No. Z180—8 in. Long; 1½ in. Cutter.. 1.90

Average Weight 2¼ Lbs. Each

STANLEY

No. 180—1½ in. Cut; 8 in. Long..... 1.10

Average Weight 2¼ Lbs.

ZENITH RABBET

These Planes are of exactly the same description as the No. 180 Series, but with the feature of a Spur which makes it possible to work across the grain of the wood.

Each

No. Z198—8 in. Long; 1 in. Cutter.. $2.10
No. Z191—8 in. Long; 1¼ in. Cutter.. 2.10
No. Z190—8 in. Long; 1½ in Cutter.. 2.10

Average Weight 2¾ Lbs. Each

STANLEY

No. 190—1½ in Cut; 8 in. Long..... $1 25
No. 191—1¼ in Cut; 8 in. Long..... 1.25
No. 192—1 in. Cut; 8 in. Long..... 1.25

Average Weight 2¼ Lbs. Each

SIDE RABBET

A convenient Tool for Side-Rabbeting and Trimming Dados, Mouldings and Grooves of all sorts; a reversible Nose Piece will give the Tool a form by which it will work close up into corners when required; Nickel Plated; Rosewood Knob.

Each

No. 98—4 in. Long, Right Hand ... $1.00
No. 99—4 in. Long, Left Hand. . . 1.00

Weight ⅛ Lb. Each

SKEW CUTTER, FILETSTER AND RABBET PLANES

This Plane has an Extra Wide Cutter; the Fence and Depth Gauge can be attached to either side for right or left hand work; Has two Adjustable Spurs; By removing Depth Gauge, Fence and Arm can be used as a Rabbet Plane.

Each

No. 289C—8½ in. Long; 1¾ in. Cutter, Japanned $1.75

Weight 4 Lbs. Each

IMPROVED DADO

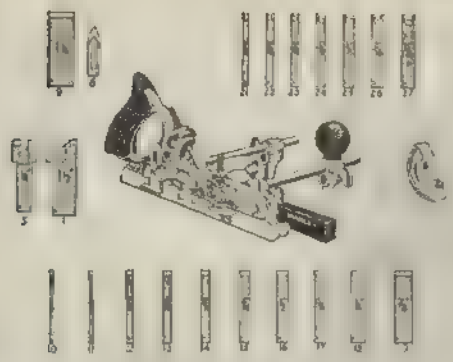
No. 89—8 in. Long; Equipped with Skew Cutters, Adjustable Depth Gauge and two Adjustable Spurs, Used for Grooving or Cutting Dados, etc.; Japanned Finish

Width Cut, In.	¼	⅜	½	⅝
Each	$1 65	1.65	1.65	1.65
Width Cut, In.	¾	⅞	1	
Each	$1.65	1.65	1.65	

Weight 1¾ Lbs. Each

All, One in a Box

FANCY PLANES



"FORTY-FIVE" PLANE

Seven Tools in one in compact and practical form; Beading and Center Beading Plane, Plow, Dado, Rabbet and Filletster, Match Plane, Sash Plane and Slitting Plane.

The Plane has two principal parts, a Main Stock and a Sliding Section. The Main Stock carries the Handle, Cutter Adjustment, a Slitting Tool, Depth Gauge, and forms a bearing for one edge of the Cutter. The Sliding Section slides on two Arms secured in the Stock and has a bearing for the other edge, allowing Cutters of different widths to be used. A Fence also slides on these Arms for use when working as a Plow, Beader or Filletster, to gauge the distance from the Cutter to the edge of the board, and to keep the Cutter at right angles to same. When used as a Filletster, the Fence slides under the Bottom of the Plane and determines the width of Cutter exposed to the work.

The Plane is fitted with spurs for use across the grain, etc., and can be used either right or left hand.

With each Plane are furnished 21 Cutters, all of which are shown in cut. Plane and Attachments packed in a neat Steel Box.

All Metal Parts are Nickel Plated. The Handle, Knob and Fence are made of Selected Rosewood.

ZENITH

Each

No. Z45—Nickel Plated; 10⅝ in. Long; Complete with 25 Cutters and Wooden Box.....$7.75

Weight 10 Lbs. Each

STANLEY

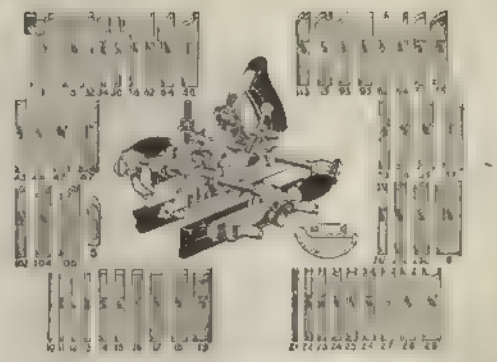
Each

No. 45 —Nickel Plated; Complete with 21 Cutters.....$7 00

Weight 9½ Lbs. Each

The Following Cutters Are Furnished With Each Plane; the Price is Given in Case Duplicates Should Be Required

Nos.	Size	Style	Each	Nos.	Size	Style	Each
1	1⅛ in.	Sash Tool	$ 50	17	⅝ in.	Plow & Dado Tool	$ 20
5	¾ in.	Match Tool	50	18	¾ in.	Plow & Dado Tool	20
8		Slitting Tool	30	19	⅞ in.	Plow & Dado Tool	20
9	1¼ in.	Filletster	25	21	⅛ in.	Beading Tool	15
10	⅛ in.	Plow & Dado Tool	15	22	3/16 in.	Beading Tool	15
11	5/16 in.	Plow & Dado Tool	15	23	¼ in.	Beading Tool	15
12	¼ in.	Plow & Dado Tool	15	24	⅜ in.	Beading Tool	20
13	7/16 in.	Plow & Dado Tool	15	25	½ in.	Beading Tool	20
14	⅜ in.	Plow & Dado Tool	20	26	5/8 in.	Beading Tool	25
15	7/16 in.	Plow & Dado Tool	20	27	½ in.	Beading Tool	.25
16	½ in.	Plow & Dado Tool	20				



"FIFTY-FIVE" PLANE

This Tool, in addition to being a Beading and Center Beading Plane, a Plow, Dado, Rabbet, Filletster and Match Plane, a Sash Plane and a Slitting Plane, is also a superior Moulding Plane, and will accommodate Cutters of almost any shape and size; in fact, it is "a planing mill within itself."

The regular equipment sent with the Plane comprises 52 Cutters, all of which are shown in the cut. These Cutters, Plane and all its Attachments, are packed in a neat Steel Box.

All Metal Parts of the Plane are Nickel Plated. The Handle and Fences are made of Selected Rosewood, and every part is well finished

ZENITH

Each

No. Z55—Nickel Plated; 10¾ in. Long, Complete with 54 Cutters and Wooden Box.....$20 00

Weight 16 Lbs. Each

STANLEY

Each

No. 55—Nickel Plated; Complete with 52 Cutters $14 00

Weight 16¼ Lbs. Each

The Following Cutters Are Furnished With Each Plane; the Price is Given in Case Duplicates Should Be Required

Nos.	Size	Style	Each	Nos.	Size	Style	Each
1	1⅛ in.	Sash Tool	$0.50	43—	1/16 in.	Hollow	$0 20
5	¾ in.	Match Tool	.50	44	3/32 in.	Hollow	.20
8		Slitting Tool	.30	45	1/8 in.	Hollow	.20
9	1¼ in.	Filletster	.25	47	1/4 in.	Hollow	.20
10	⅛ in.	Plow & Dado Tool	.15	53	1/16 in.	Round	.20
11	5/16 in.	Plow & Dado Tool	.15	54	3/32 in.	Round	.20
12	¼ in.	Plow & Dado Tool		55—	1/8 in.	Round	.20
13—	7/16 in.	Plow & Dado Tool		67—	1/8 in.	Round	.20
14	⅜ in.	Plow & Dado Tool	.25	62—	3/32 in.	Quarter Hollow	.45
15	7/16 in.	Plow & Dado Tool	.20	64—	3/16 in.	Quarter Hollow	.50
16	½ in.	Plow & Dado Tool	.20	73—	3/16 in.	Quarter Round	.45
17	5/8 in.	Plow & Dado Tool	.20	75—	3/16 in.	Quarter Round	.50
18	¾ in.	Plow & Dado Tool	.20	82—	3/16 in.	Reverse Ogee	.45
19—	⅞ in.	Plow & Dado Tool	.25	84—	3/16 in.	Reverse Ogee	.50
21	⅛ in.	Beading Tool	.15	86	3/16 in.	Reverse Ogee	.50
22	3/16 in.	Beading Tool	.15	93	1/16 in.	Roman Ogee	.45
23	¼ in.	Beading Tool	.15	95	3/32 in.	Roman Ogee	.50
24—	5/16 in.	Beading Tool	.20	102	1/16 in.	Gothic Ogee	.45
25	⅜ in.	Beading Tool	.20	104	3/32 in.	Gothic Ogee	.50
26	7/16 in.	Beading Tool	.20	106	1/8 in.	Gothic Ogee	.50
27	½ in.	Beading Tool	.20	113	1/16 in.	Quarter Twist Bead	.45
28	⅝ in.	Beading Tool	.20	115	3/32 in.	Quarter Twist Bead	.50
29	¾ in.,	Beading Tool	.30	213—	1/8 in.,	Reeding Tool, Two Beads	.30
32	¾ in.;	Fluting Tool	.30	222—3/16	in.,	Reeding Tool, Two Beads	.20
34	⅝ in.;	Fluting Tool	.30	232	1/4 in.;	Reeding Tool, Two Beads	.30
36	½ in.,	Fluting Tool	.30				
38	¾ in;	Fluting Tool	.30				

TRAUT ADJUSTABLE DADO, PLOW, ETC.

Each

No. 46—Nickel Plated, with 11 Tools, Dado, Filletster, Plow, etc.....$8 00

Weight 5½ Lbs. Each

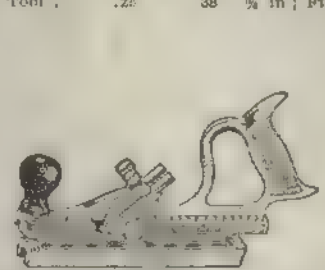
This Tool is accompanied by Eight Plow and Dado Bits, Sizes 1/8, ¼, 3/16, ⅜, 5/16, ½, ⅝, ¾ and 1¼ in., a Filletster Cutter, a Slitting Tool and a Tonguing Tool

TRAUT ADJUSTABLE DADO ONLY

Each

No. 47—Has the same Stock and Arms as shown above, including Bits, Sizes ⅜, ½, ⅝, ¾ and 1¼ in., and Slitting Tool $4.50

Weight 4 Lbs. Each



STANLEY TONGUING AND GROOVING

Nickel Plated Stock and Fence, Including Tonguing and Grooving Tools

The Plane has two separate Cutters, a suitable distance apart; When the Guide or Fence is set, both Cutters work and a Tongue can be made; the Fence is hung on a pivot and can be swung around, end for end; This movement covers one of the Cutters and also furnishes a Guide for grooving an exact match for the Tongue.

No. 48—8¾ in., for ⅜ to 1¼ in. Boards; Weight 2⅞ Lbs. Each.....$2 75

No. 49—8 in., for ⅜ to ¾ in. Boards; Weight 2⅝ Lbs. Each..... 2.75

PLOW, BEADING AND MATCHING PLANES

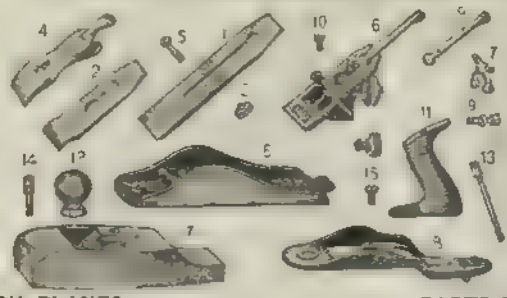
A Handy Tool for light work; the Main Stock carries a Spur and Depth Gauge and forms a support for one side of the Cutter and a Fence with a 5 in. adjustment; Handle is Metal being a part of the Main Stock; the Cutters comprise Seven Plow and Dado Bits, Sizes ⅛, 3/16, ¼, 5/16, ⅜, ½, ⅝ and ¾ in.; Seven Beading Tools, Sizes 1/16, 3/32, ⅛, 5/32, ¼, 5/16, ⅜ and ½ in., and ⅛ in. Turning Tool.

Each

No. 50—Nickel Plated; 9¼ in. Long, 16 Cutters $5 00

Weight 3⅛ Lbs. Each

ZENITH PLANE PARTS



PARTS FOR IRON BENCH PLANES

No. of this Part	For Planes No.	Z2 Z602	Z603 Z604	Z4 Z605	Z1 Z606½	Z6 Z606	Z7 Z607	Z8 Z608
1	Single Steel Cutter	$0.35	$0.40	$0.45	$0.45	$0.45	$0.45	$0.50
2	Cap for Steel Cutter	.25	.25	.30	.20	.30	.30	.30
1-2	Double Steel Cutter	.55	.65	.75	.65	.75	.75	.80
3	Cap Screw	.08	.08	.08	.08	.08	.08	.08
4	Clamp	.40	.40	.40	.40	.40	.40	.40
5	Clamp Screw	.06	.06	.06	.06	.06	.06	.06
6	Frog Complete	.50	.50	.50	.50	.50	.50	.50
7	Frog Adjustment	.15	.15	.15	.15	.15	.15	.15
8	Brass Adjusting Nut	.18	.18	.18	.18	.18	.18	.18
9	Lateral Adjustment	.15	.15	.15	.15	.15	.15	.15
10	Frog Screw	.06	.06	.06	.06	.06	.06	.06
11	Handle	.20	.20	.20	.20	.20	.20	.20
12	Knob	.23	.23	.23	.23	.23	.23	.23
13	Handle Bolt	.20	.20	.20	.20	.20	.20	.20
14	Knob	.20	.20	.20	.20	.20	.20	.20
15	Handle Screw	.06	.06	.06	.06	.06	.06	.06
16	Bottom	1.35	1.60	1.90	2.25	2.65	3.70	4.50
19	Adjusting Screw	.06	.06	.06	.06	.06	.06	.06
20	Double Steel Cutter, with Cap Screw (Parts 1, 2 and 3)	.63	.73	.83	.83	.83	.83	.83

PARTS FOR WOOD BOTTOM PLANES

No. of this Part	For Planes No.	Z21 Z22 Z23	Z24	Z25	Z26	Z27	Z28 Z29	Z30 Z31	Z32 Z33	Z34
1	Single Steel Cutter	$0.35	$0.40	$0.40	$0.40	$0.40	$0.45	$0.45	$0.50	$0.50
2	Cap for Steel Cutter	.25	.25	.25	.20	.25	.30	.30	.30	.30
1-2	Double Steel Cutter	.60	.65	.65	.60	.65	.75	.75	.80	.80
3	Cap Screw	.08	.08	.08	.08	.08	.08	.08	.08	.08
4	Clamp	.33	.33	.33	.33	.33	.33	.33	.33	.33
5	Clamp Screw	.06	.06	.06	.06	.06	.06	.06	.06	.06
6	Frog Complete	.50	.50	.50	.50	.50	.50	.50	.50	.50
7	Frog Adjustment	.15	.15	.15	.15	.15	.15	.15	.15	.15
8	Brass Adjusting Nut	.18	.18	.18	.18	.18	.18	.18	.18	.18
9	Lateral Adjustment	.15	.15	.15	.15	.15	.15	.15	.15	.15
10	Frog Screw	.06	.06	.06	.06	.06	.06	.06	.06	.06
11	Handle	.20	.20	.20	.20	.20	.20	.20	.20	.20
12	Knob	.18	.18	.18	.18	.18	.18	.18	.18	.18
13	Handle Bolt	.20	.20	.20	.20	.20	.20	.20	.20	.20
14	Knob	.20	.20	.20	.20	.20	.20	.20	.20	.20
17	Bottom	.65	.65	.65	.80	.90	.80	1.10	1.25	1.35	1.50
18	Toe Casting	.33	.33	.33	.33	.33	.33	.33	.33	.33
20	Double Steel Cutter, with Cap Screw (Parts 1, 2 and 3)	.68	.73	.73	.68	.78	.88	.88	.88	.88

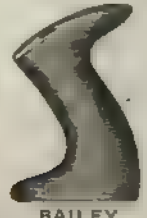
PARTS FOR BLOCK PLANES

No. of this Part	For Planes No.	Z100	Z102	Z110	Z108	Z220	Z320	Z130	Z7
22	Adjusting Lever					$0.15			
25	Clamp					.25	$0.25		
26	Adjusting Screw								
27	Slide								
31	Steel Cutter	$0.35	$0.40	$0.45	$0.45	.50	$0.40	$0.40	$0.45
34	Clamp	.15	.15	.15	.15				.15
35	Clamp Screw	.05				.05	.05		.05
36	Bottom	.20	.25	.40	.40	.50	.60	.55	.90
37	Adjusting Lever				.05				
38	Adjusting Nut				.15				
41	Knob			.15		.15	.15	.15	
45	Clamp Set Screw		.15	.15	.15			.15	
47	Headless Machine Screw				.05				

PARTS FOR BLOCK PLANES

No. of this Part	For Planes No.	Z3½	Z5	Z9½	Z11½	Z60	Z65	Z16 Z17	Z15 Z17
24	Cam	$0.10	$0.10	$0.10	$0.10	$0.10	$0.10	$0.10	$0.10
25	Clamp	.25	.25	.25	.35	.25	.25	.30	.30
26	Adjusting Screw					.15	.15		
27	Slide					.10	.10		
31	Steel Cutter	.25	.25	.25	.25	.25	.25	.25	.25
35	Clamp Screw	.05	.05	.05	.05	.05	.05	.05	.05
36	Bottom	1.10	1.25	1.10	1.20	1.10	1.20	1.10	1.20
37	Adjusting Lever	.08	.08	.08	.08			.08	.08
38	Adjusting Nut	.15	.15	.15	.15			.15	.15
39	Lateral Adjustment	.15	.15	.15	.15			.15	.15
40	Mouth Piece	.15	.15	.15	.15	.15	.15	.15	.15
41	Knob	.15	.15	.15	.15	.15	.15	.15	.15
42	Knob Handle			.20	.20				
43	Handle Casting			.15	.15				
44	Handle Screw			.05	.05				
46	Fillister Head Screw	.05	.05	.05	.05				
47	Headless Machine Screw	.05	.05	.05	.05			.05	.05
48	Cog Nut			.05	.05				

PLANE HANDLES



BAILEY

Per Dozen

No. 11—Rosewood; Fits Bailey All-Iron Planes, from Nos. 4½ to 8.....$2.40
Weight 1½ Lbs. per Dozen

No. 11W—Beechwood, Varnished; Fits Bailey Wood Bottom Planes, Nos. 26 to 34 ..... 1.80
Weight 2 Lbs. per Dozen

JACK

Plain Beechwood

Per Dozen

No. 10—For Wood Jack Planes.....$0.84
One Dozen in a Box
Weight 3 Lbs. per Dozen

FORE AND JOINTER

Per Dozen

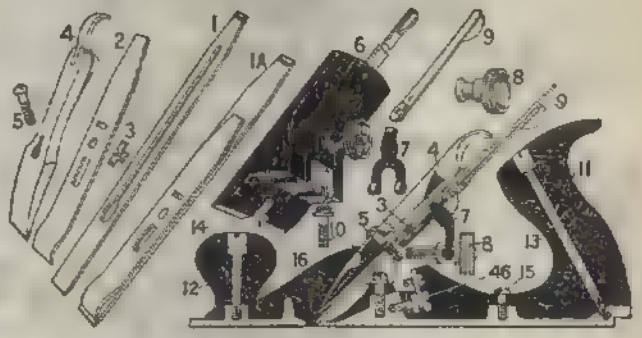
No. 12—For Wood Fore and Jointer Planes $1.50
Weight 4½ Lbs. per Dozen

Above Handles Carried in Stock; Special Ones Shipped Direct from Factory

BAILEY AND STANLEY PLANE PARTS

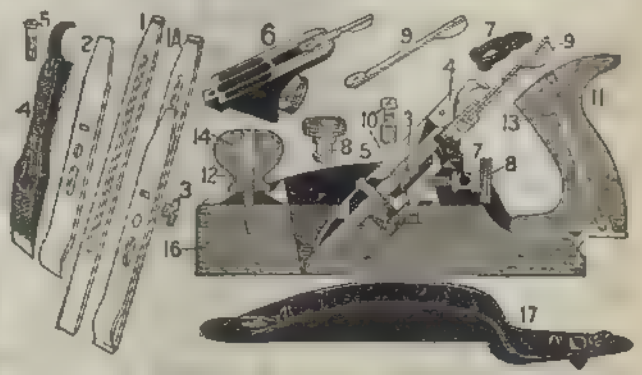
BAILEY IRON PLANES.

NO.	NAME OF PART	NO. OF PLANE	1	2 2C	3 3C	4 4C	4½ C	5 5C	5½ C	6 6C	7 7C	8 8C
1A	Double Plane Iron		$0 32	0 35	0 38	0 42	0 48	0 42	0 47	0 48	0 48	0 50
1	Single " "		18	21	23	25	29	25	28	29	29	32
2	Plane Iron Cap		14	14	15	17	19	17	19	19	19	18
3	Cap Screw		05	05	05	05	05	05	05	05	05	05
4	Lever Cap		25	25	25	25	25	25	25	25	25	25
5	" " Screw		05	05	05	05	05	05	05	05	05	05
6	Frog Complete		35	35	35	35	35	35	35	35	35	35
7	"Y" Adjusting Lever		05	05	05	05	05	05	05	05	05	05
8	Adjusting Nut		10	10	10	10	10	10	10	10	10	10
9	Lateral Adj Lever		10	10	10	10	10	10	10	10	10	10
10	Frog Screw		05	05	05	05	05	05	05	05	05	05
11	Plane Handle		20	20	20	20	20	20	20	20	20	20
12	" Knob		15	15	15	15	15	15	15	15	15	15
13	Handle Bolt & Nut		10	10	10	10	10	10	10	10	10	10
14	Knob " " "		10	10	10	10	10	10	10	10	10	10
15	Plane Handle Screw						05	05	05	05	05	05
16	Plane Bottom		85	85	1 00	1 00	1 20	1 20	1 20	1 65	2 35	2 85
46	Frog Adj. Screw		05	05	05	05	05	05	05	05	05	05



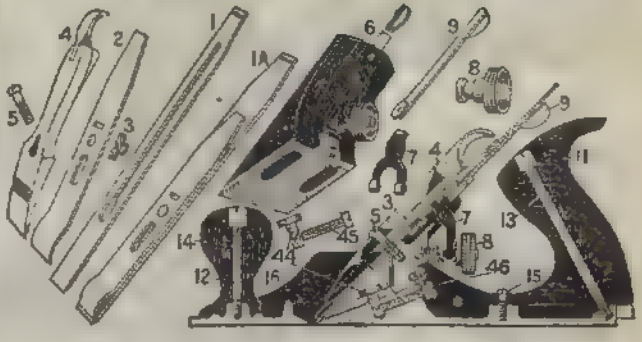
BAILEY WOOD PLANES.

NO.	NAME OF PART	NO. OF PLANE	21 22 23	24 25 35	26	27	27½	28 29	30 31	32 33 34	36	37
1A	Double Plane Iron		$0 38	0 42	0 42	0 45	0 47	0 48	0 48	0 50	0 48	0 60
1	Single " "		23	25	25	27	28	29	28	32	29	32
2	Plane Iron Cap		16	17	17	18	19	19	19	19	19	18
3	Cap Screw		05	05	05	05	05	05	05	05	05	05
4	Lever Cap		20	20	20	20	20	20	20	20	20	20
5	" Screw		05	05	05	05	05	05	05	05	05	05
6	Frog Complete		30	30	30	30	30	30	30	30	30	30
7	"Y" Adjusting Lever		05	05	05	05	05	05	05	05	05	05
8	Adjusting Nut		10	10	10	10	10	10	10	10	10	10
9	Lateral Adj. Lever		10	10	10	10	10	10	10	10	10	10
10	Frog Screw & Bush'g		10	10	10	10	10	10	10	10	10	10
11	Plane Handle			10	10	10	10	10	10	10	10	10
12	" Knob		10	10	10	10	10	10	10	10	10	10
13	Handle Bolt & Nut			10	10	10	10	10	10	10	10	10
14	Knob " " "		10	10	10	10	10	10	10	10	10	10
16	Plane Bottom		40	40	50	50	50	70	80	85	60	70
17	Top Casting		20	20	20	20	20	20	20	20	20	20



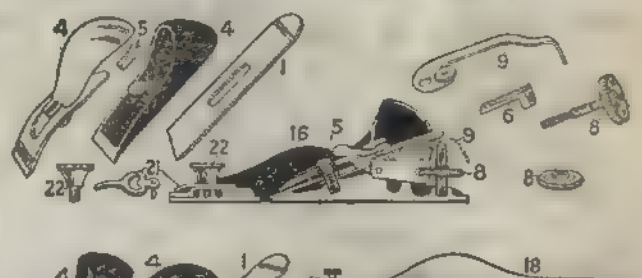
BED ROCK PLANES.

NO.	NAME OF PART	NO. OF PLANE	602 C	603 C	604 C	604½ C	605 C	606 C	607 C	608 C	608 C
1A	Double Plane Iron		$0 35	0 38	0 42	0 48	0 42	0 47	0 48	0 48	0 50	0 50
1	Single " "		21	23	25	29	25	28	29	29	32	32
2	Plane Iron Cap		14	15	17	19	17	19	19	19	18	18
3	Cap Screw		06	06	06	05	05	05	05	05	05	06
4	Lever Cap		30	30	30	30	30	30	30	30	30	30
5	" Screw		05	05	05	05	05	05	05	05	05	05
6	Frog Complete		50	50	50	50	50	50	50	50	50	50
7	"Y" Adjusting Lever		05	05	05	05	05	05	05	06	05	05
8	Adjusting Nut		10	10	10	10	10	10	10	10	10	10
9	Lateral Adj Lever		10	10	10	10	10	10	10	10	10	10
11	Plane Handle		20	20	20	20	20	20	20	20	20	20
12	" Knob		15	15	15	15	15	15	15	15	15	15
13	Handle Bolt & Nut		10	10	10	10	10	10	10	10	10	10
14	Knob " " "		10	10	10	10	10	10	10	10	10	10
15	Plane Handle Screw					05	05	05	05	05	05	05
16	Plane Bottom		1 10	1 25	1 25	1 50	1 50	1 80	2 20	3 10	3 50	3 60
44	Frog Pin		10	10	10	10	10	10	10	10	10	10
45	Frog Clamping Screw		05	05	05	05	05	05	05	05	05	05
46	Frog Adjusting Screw		05	05	05	05	05	05	05	05	05	05



BAILEY AND STANLEY BLOCK PLANES.

NO.	NAME OF PART	NO. OF PLANE	9½ 9¾	16 15½	16 17	18	19	60	60½	61	65	65½
1	Single Plane Iron		$0 17	0 17	0 17	0 17	0 17	0 17	0 17	0 17	0 17	0 17
4	Lever Cap		10	10	15	20	20	15	10	15	15	10
5	" Screw		05	05	06	05	05	05	05	05	05	05
6	Frog Complete							10	10	10	10	10
7	Adjusting Lever		05	05	05	05	05					
8	Adjusting Nut		10	10	10	10	10	10	10	10	10	10
9	Lateral Adj. Lever		10	10	10	10	10					
11	Plane Handle		25	25								
18	Plane Bottom		70	75	75	70	75	60	60	40	75	75
21	Eccentric Plate		10	10	10	10	10	10	10	10	10	10
22	Finger Rest Knob		10	10	10	10	10	10	10	10	10	10



STANLEY BLOCK PLANES.

NO.	NAME OF PART	NO. OF PLANE	100 101	102	103	110	120	130	131	140	203	220
1	Single Plane Iron		$0 06	0 16	0 10	0 13	0 17	0 13	0 17	0 20	0 20	0 17
4	Lever Cap		05	10	10	10	10	10	10	15	10	10
5	" Screw								05	05	05	05
6	Frog Complete						15		15	10	10	10
8	Adjusting Nut								10	10	10	10
12	Plane Knob					10	10	10	15	15	10	10
18	Plane Bottom		10	15	20	25	30	35	70	75	25	35
19	Detachable Side									25		
19	Side Screw (Pair)									10		

PLANE IRONS

In Ordering Plane Irons for Any Plane, Please State the Number of Plane for Which Wanted

The Cut Shows a Plane Iron with Cap Screw fastened just back of Circular Opening in the Slot and in position for using the Iron.

Shows a Plane Iron with Cap Screw moved to back end of slot, in position for sharpening the Iron, without removing the Cap.

ZENITH, FOR IRON AND WOOD PLANES

Imported Knife Steel Polished; Perfectly Tempered, Ground and Honed

No. Z1—SINGLE OR CUT IRONS

Cut, Inches	1⅝	1¾	2	2¼	2⅜	2⅝
Weight Dozen, Lbs.	4	5	6	7½	7½	9
Each	$0.33	.35	.40	.45	.45	.50

No. Z2—DOUBLE IRONS

Cut, Inches	1⅝	1¾	2	2¼	2⅜	2⅝
Weight Doz., Lbs.	7	8	9½	11	12	13¼
Each	$0.55	.60	.65	.75	.75	.80

Half Dozen in Package

STANLEY

BAILEY PATENT IMPROVED

Best Quality English Cast Steel, Perfectly Tempered, Polished, Ground and Honed

No. 1—SINGLE IRONS

For Bailey Iron and Wood Planes

Cut, In	1¾	2	2⅛	2¼	2⅜	2⅝
Weight Dozen, Lbs.	2¼	3¼	3½	4	4½	4½
*Each	$0 23	.25	.27	.28	.29	.32

No. 2—DOUBLE IRONS

For Bailey Iron Planes, Only

Cut, In	1¾	2	2⅛	2¼
Weight Dozen, Lbs	4½	5½	7¼	7½
*Each	$0.38	.42	.47	.48

Irons for Stanley Planes, other than Block, Bed Rock and Stanley Wood Plane Double Irons will be ordered Special. These Irons are not interchangeable with any other make of Planes

AMERICAN

Extra Quality Cast Steel; Perfectly Tempered, Ground and Honed; Upper Part Natural Finish, Polished Bit. These Irons will fit any common Wood Bench Planes

No. 3—SINGLE OR CUT IRONS

Cut, Inches	1⅞	2	2⅛	2¼	2⅜	2½	3
Weight Dozen, Lbs	5	6	6½	7½	7½	9	10½
Each	$0.25	.26	.28	.31	.34	.38	.58

No. 4—DOUBLE IRONS

Cut, Inches	1⅞	2	2⅛	2¼	2⅜	2½	2⅝	2¾	3
Weight Doz., Lbs.	8½	9½	10½	11	12	12¾	13½	14	14¼
Each	$0.52	.54	.55	.58	.62	.68	.75	.85	.98

Half Dozen in a Package

BLOCK PLANE IRONS

	Per Dozen
Bailey Planes, Nos. 9½, 9¾, 15, 16, 17, 18, 19, 60, 65	$2 35
For Stanley Planes, Nos. 102 and 103	1 25
For Stanley Planes, Nos. 110 and 130	1 85
For Stanley Planes, No. 220	2 35
For Stanley Planes, No. 100	75

EXTRA CAPS

	Per Dozen
For Stanley Planes, Nos. 102, 103, 110, 120, 130, 220	$1 75
For Bailey Planes, Nos. 9½, 9¾, 15 and 15½	1.75
	Each
For Bailey Planes, Nos. 16, 17, 60 and 65	$0 15
For Bailey Planes, Nos. 18 and 19	20

Half Dozen in a Box

HARTFORD PLANES

Hartford Planes are substantially made from the very best materials and are guaranteed against any defects in material and workmanship, and to give satisfactory service

BLOCK; Adjustable

Each

No. H15—7 in. Long; 1⅝ in. Cut.....$1.70
Weight 1⅞ Lbs. Each

BLOCK; Knuckle Joint

Each

No. H18—6 in. Long; 1⅝ in. Cut.....$1 85
No. H19—7 in. Long; 1⅝ in. Cut 1 95
Weight 1¾ and 2 Lbs. Each

BLOCK; Adjustable

Each

No. H9½—6 in. Long; 1⅝ in. Cut.....$1.60
Weight 1¾ Lbs. Each

BLOCK; Adjustable

Each

No. H102—6½ in. Long; 1¼ in. Cut...$0.65
Weight 1 Lb. Each

BLOCK; Adjustable

Each

No. H103—5½ in. Long; 1¼ in. Cut; Brass Adjusting Screw $0 70
Weight 1 Lb. Each

BLOCK; Adjustable

Each

No. H220—7 in. Long; 1⅝ in. Cut; Screw Adjustment $1.00
Weight 1⅞ Lbs. Each

SMOOTH; Corrugated Bottom

Each

No. H3C—8 in Long; 1¾ in. Cut. ...$3 00
No. H4C—9 in. Long; 2 in. Cut..... 3 25
Weight 3¼ and 3½ Lbs. Each

JACK; Corrugated Bottom

Each

No. H5C—14 in. Long; 3 in. Cut ... $3 75
Weight 4½ Lbs. Each

JACK; Wood Bottom

Each

No. H26—15 in. Long; 2 in. Cut... ...$2 25
Weight 4 Lbs Each

BLOCK, Non-Adjustable

Each

No. H110—7 in. Long; 1⅝ in. Cut.....$0.70
Weight 1½ Lbs. Each

BLOCK; Double Ender

Each

No. H130—8 in. Long; 1¾ in. Cut; Put Cutter into End Slot to work into Close Places, Corners, etc.....$1.00
Weight 1⅞ Lbs. Each

SMOOTH

Each

No. 3W—8 in. Long, Assorted 2, 2⅛ and 2⅜ in. Cut.....$0 90
Average Weight 2 Lbs. Each

JACK

Each

No. 15W—Jack; 16 in. Long, Assorted 2, 2⅛ and 2⅜ in. Cut $1 00
No. 21W—Fore; 22 in. Long, Assorted 2⅜, 2½ and 2⅝ in. Cut 1.70
Average Weight 6 Lbs Each

No. 27W—JOINTER

Each

26 in. Long, Assorted 2⅜, 2⅝ and 2¾ in. Cut $1.80
28 in. Long, Assorted 2½, 2⅝ and 2¾ in. Cut 1 90
Average Weight 7 Lbs. Each

No. 91W—NOSING STEP, WITH TWO IRONS

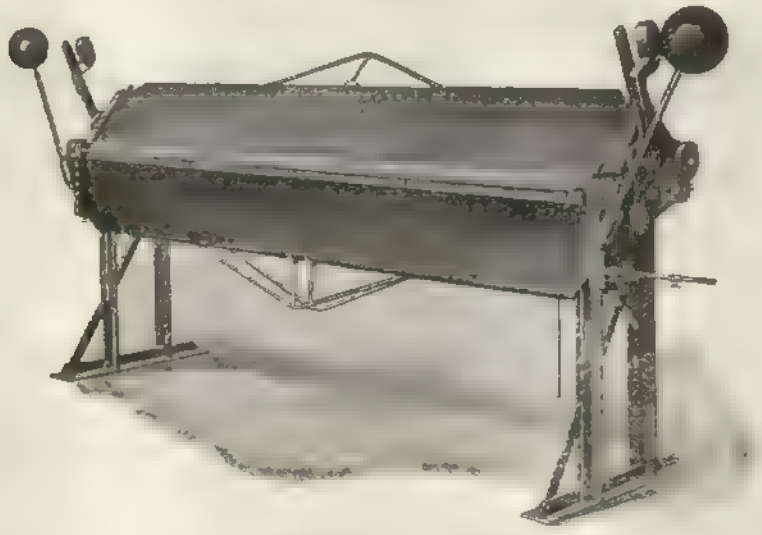
For Rounding the Edges of Steps, etc.

Each

⅝, ⅞, 1, 1⅛ and 1¼ in. Cut $1 10
1⅜ and 1½ in. Cut..... 1 20
1⅝ and 2 in. Cut..... 1 50

Open Stock; Average Weight 1½ Lbs. Each
Specify Size and Number in Ordering

CHICAGO STEEL HAND CORNICE BRAKES

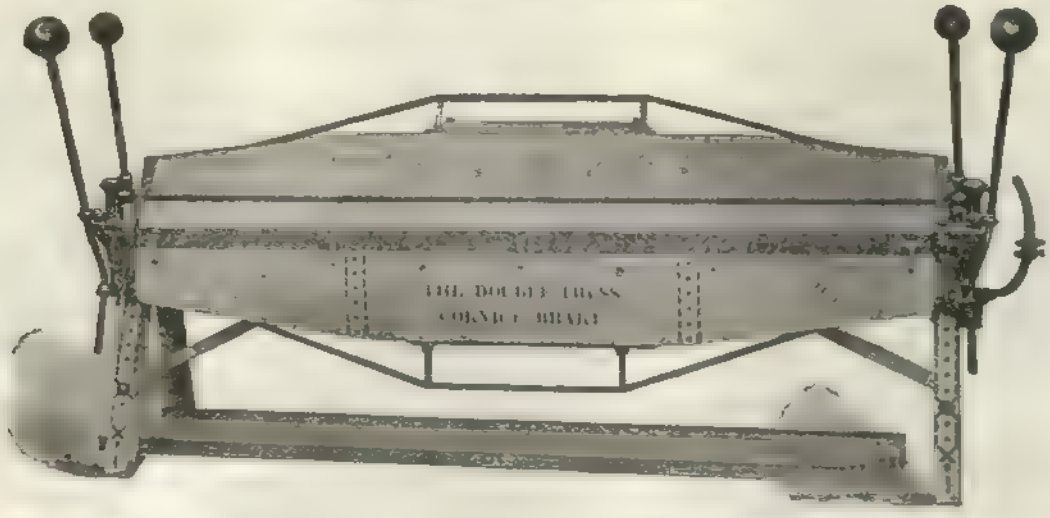


Cut Shows 8 Ft. Brake

This Machine is suitable for Rapid and Accurate Bending. Sheets can be formed of the gauge rated, full length with ordinary flange. The Apron or Bending Leaf is ½ in. normally. By the addition of Angle Steel it is reinforced for heavy work. Removal of the Steel Bar reduces it to ¼ in., which allows close reverse members being formed. A Wrench fitting all adjustable parts is furnished, also **Five Moulding Forms** suitable for making Cornice Ridge Roll and other Moulding Work.

	Each
No. 2 —10 ft. 1 in. Bending Edge; will Bend 16 Gauge; Weight 2500 Lbs.	$325.00
No. 2B—10 ft. 1 in. Bending Edge; will Bend 18 Gauge, Weight 1900 Lbs.	281.50
No. 2C— 8 ft. 1 in. Bending Edge, will Bend 14 Gauge. Weight 2000 Lbs.	252.50
No. 3 — 8 ft. 1 in. Bending Edge; will Bend 16 Gauge; Weight 1500 Lbs.	193.75
No. 4 — 8 ft. 1 in. Bending Edge; will Bend 18 Gauge; Weight 1000 Lbs.	137.75

DOUBLE TRUSS WOOD BRAKES



Very Strong, Durable and Easy-Acting. Built of Hard Wood reinforced by **Double Truss**, making them absolutely rigid at all points; All wearing parts are heavily protected, Heavy Malleable Castings; Much lighter than all metal machines. **No Springs or Complicated Parts** to get out of order. Will form any combination of angles and curves very fast and easily operated.

Each	Each	
No. 4—Bending Edge, 4 ft. 1 in. Long, ⅛ in. Wide; Will form No. 22 Gauge or Lighter Full Length; Six Half Round Formers, ⅛ to 2½ in. Diameter $62.50	**No. 8—Bending Edges, 8 ft. 1 in. Long, ⅛ in. Wide; Will Form No. 22 Gauge or Lighter Full Length; Six Half Round Formers, ⅛ to 2½ in. Diameter** $143.75	**No. 10—Bending Edge, 10 ft. 1 in. Long, ⅛ in. Wide; Stiffening Bar for Heavy Work; Will Form No. 22 Gauge or Lighter Full Length; Six Half Round Formers, ⅛ to 2½ in. Diameter** $200.00
Weight, Boxed, 375 Lbs. Each	Weight, Boxed, 1025 Lbs. Each	Weight, Boxed, 1400 Lbs. Each

Above Cornice Brakes not Carried in Stock; Shipped Direct from Factory

TINNERS' SHEARS

ZENITH, STRAIGHT

Drop Forged, Refined Iron; Blades laid with High Grade Steel, Hardened and Tempered; Handles shaped to prevent cramping Hand

Nos.	10Z	9Z	8Z	7Z
Cut, In.	2½	3	3½	4
Weight, Lbs.	1	1½	2	2½
Per Pair	$1 60	1.75	2 00	2 50

NIAGARA, STRAIGHT

Drop Forged, Steel Laid Blades, Hardened and Tempered

Nos.	10N	9N	8N	7N	6½N
Cut, In.	2½	3	3½	4	4½
Weight, Lbs.	1	1½	2	2½	3
Per Pair	$1 60	1.75	2 00	2 50	3.00

HOUSEHOLD, STRAIGHT

Per Pair

No. 3H—Length 10¼ in., Cut 2¾ in., Polished Blades, Japanned Handles; Forged, Steel Laid Blades.....$1.25

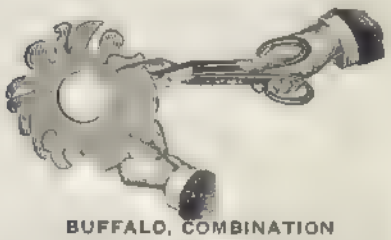
Half Dozen in Box; Wt. 10 Lbs. per Dozen

CAST IRON SNIPS

Per Pair

No. 90—Length of Cut 2¾ in., Length Over-all 10¾ in.....$0 90

Weight 10 Lbs. per Dozen



BUFFALO, COMBINATION

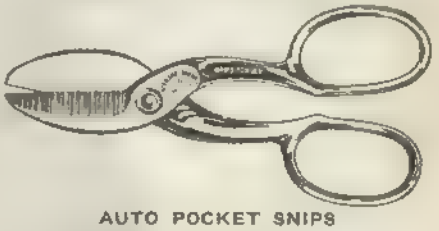
These Shears will cut Curves, Scrolls and Irregular Shapes as well as Straight Work; Drop Forged Steel, Cast Steel Laid Blades, Hardened and Tempered.

Nos.	19	18	17
Cut, In.	3	3½	4
Weight, Lbs.	1½	2	3
Per Pair	$2.25	2.50	3.00

NIAGARA, CIRCULAR

Drop Forged; Steel Laid Blades, Hardened and Tempered.

Nos.	10C	9C	8C	7C
Cut, In.	2½	3	3½	4
Weight, Lbs.	1	1½	2	2½
Per Pair	$2 25	2.50	3 00	3.50



AUTO POCKET SNIPS

For Cutting Metal, Wire Cloth, Leather, Carpets, Linoleum, etc.

Per Dozen Pairs

No. 28—Drop Forged Steel, Length, Over-all 7 in., 2 in. Cut; Polished Blades; Gun Metal Finished Handles $12.00

Half Dozen Pairs in a Box

Weight 6 Lbs. per Dozen Pairs

DOUBLE CUTTING

Will cut apart Cylinders of Sheet Metal, Stove Pipe, etc., without leaving ragged edges; Also for cutting off bottoms of cans, pails, etc.; Center Blade is pointed to start the cut.

Per Pair

No. 12½—With Patent Crimper; Length Over-all 13½ in., Drop Forged; Solid Tool Steel Center Blade; Steel Laid Outer Jaw.. .. ..$7.00

Weight 2¼ Lbs. per Pair

No. 13½—Without Patent Crimper; Length Over-all 13½ in.; Drop Forged; Solid Tool Steel Center Blade; Steel Laid Outer Jaw..... 6.00

Weight 2¼ Lbs. per Pair

COMPOUND LEVER SNIPS

The Compounding Lever action gives an evenly distributed cutting strain from a close throat start to the finish at the point of the Blade; Made of Drop Forged Crucible Steel

Per Pair

No. 12—Length 12 in.; 3 in. Cut; For Cutting Seams or Multiples of Thicknesses in Metal Work; Splitting Large Sheets and Many Classes of Work Usually Done with Bench Shears; Weight 2⅛ Lbs.....$6.00

No. 14—Length 14 in.; 3½ in. Cut; For Heavy Work. Weight 2¾ Lbs. per Pair 7.00

Open Stock

BENCH SHEARS

RIGHT HAND

Cast Steel, Polished Blades, Japanned Handles, Bent Heels

Nos.	5	4	3	2
Cut, In.	7	8	8¾	8⅝
Cuts Sheets, Gauge	22	22	22	22
Length, In.	27½	29	32	33
Weight, Lbs	8	10	13	17
Per Pair	$11 00	14 00	15.50	17.00
Nos.	1	0	00	
Cut, In.	9	10½	12	
Cuts Sheets, Gauge	20	18	16	
Length, In	36	41	46	
Weight, Lbs.	20	27	30	
Per Pair	$19.00	27.00	30 00	

Bench Shears as regularly made have Right Hand Cut that is, the lower blade is on the right side of the Shears. Left Hand Shears can be furnished, when desired, at an additional cost, and for shipment from factory

METAL PUNCHES

PORTABLE BENCH SHEARS

Will cut through any piece of Metal up to 12 Gauge Bessemer Steel, or ⅛ in. Common Iron, also Band Saws of any thickness

Per Pair

No. 30—Malleable Iron Body; Tempered Steel Blades, 5½ in. Long; Bessemer Steel Bolts.. .. ..$16.50

Weight 20 Lbs. per Pair

PORTABLE HAND PUNCH

Can be used anywhere and takes the place of an extra man; Powerful Capacity, Indestructible, Operated with little exertion; Dies easily and quickly adjusted; No Bolts to Remove.

No. 2—Capacity ⅛ in. Hole, through ¼ in. Iron; Length Over-all 23 in.; Drop Forged Steel Parts; Complete with Two ⅛ in. Punches and One Die.. ....$18.00

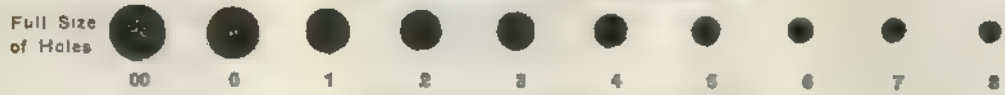
Weight 12 Lbs. Each

Each

No. 2P—Extra Punches in Stock, 1/16, ⅛, ¼, ⅜, ⅜ and ½ in...$1 00

No. 2D—Extra Dies in Stock, 1/16, ⅛, ¼, ⅜, ⅜ and ½ in.... 1.00

TINNERS' TOOLS



TINNERS' RIVET SETS AND HEADERS

Cast Steel, Black Japanned

Size Nos.	00	0	1	2	3	4	5	6	7	8
For Iron Rivets, Lbs.	14	10 & 12	8	6	4 & 5	2½ & 3	1¾ & 2	1½	1¼	10 & 12 Oz.
For Copper Rivets, Nos.		5	6	7	8	9	10 & 11	12	13	14
Weight Each, Lb.	⅛	⅜	⅓	⅓	⅓	⅜	¼	¼	¼	¼
Each	$1 50	1.50	1.26	1.26	1.00	1.00	.74	.74	.64	.64

Half Dozen in a Paper Box

TINNERS' HOLLOW PUNCHES

Size Hole, In.	3/16	½	5/16	¾	7/16	1	1¼	1⅜	1½	1¾	2	2¼	2½
Weight Each, Lbs.	¼	⅜	⅛	⅜	⅜	⅜	1¼	1⅛	1⅜	2	2⅛	2⅛	2¾
Each	$0 57	.75	94	1.13	1 32	1 50	1 88	2 07	2 25	2 63	3 00	3.38	3 75

Open Stock

TINNERS' SOLID PUNCHES

Cast Steel, Square Shank; 4½ In. Long

Nos.	0	1	2	3	4	5	6	7	8	Per Dozen
Diam. of Point	5/32	9/32	7/32	5/32	5/32	4/32	3/32	2/32	1/32	
Size Shank, In.	5/16	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	
Weight Dozen, Lbs.	2	1⅝	1¼	1¼	1¼	1¼	1⅛	1	⅝	
All Sizes										$1.44

One Dozen in a Box

TINNERS' PRICK PUNCHES

Per Dozen

No. 440—5/32x4 In. Solid Cast Steel, Round, Knurled Shank, Straw Colored Head and Point.....$1.75

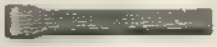
One Dozen in a Box; Weight ⅝ Lb. per Dozen

TINNERS' CENTER PUNCHES

Per Dozen

No. 455—5/32x4 In. Solid Cast Steel; Round, Knurled Shank, Straw Colored Head and Point.....$1.75

One Dozen in a Box; Weight ⅝ Lb. per Dozen



TINNERS' WIRE CHISELS

Cast Steel, 5 In. Long

For Cutting off Small Work, starting Hole for Snips, etc.

Width, In.	¼	⅜	½	⅝	¾	⅞	1
Wt. Each, Oz.	⅛	⅛	⅜	⅜	1	1⅛	1¼
Per Dozen	$1.20	1.35	1.50	1.65	1.80	1.95	2.10

One Dozen in a Box

TINNERS' LANTERN CHISELS

Per Dozen

No. 33—Cast Steel, ½ In. Wide, 5 In. Long; For Cutting Holes in Eaves Trough, or any other Circular Work.....$1.80

One Dozen in a Box; Weight 2 Lbs. per Dozen

TINNERS' CHISELS AND PUNCHES IN SETS

All 5 In. Long, Solid Cast Steel

Per Set of 6

No. 44—Consists of One ¾ In. Wire Chisel; One ½ In. Lantern Chisel; Three Solid Punches, Sizes 5/32, 7/32, 9/32 In., and One 5/32 In. Prick Punch.....$1.44

One Set in a Box; Weight ⅞ Lb. per Se.

TINNERS' MACHINES

SHEET IRON FOLDERS

For folding edges of sheets already formed into cylindrical shape; For 24 Gauge Material and lighter

NIAGARA ADJUSTABLE

Will produce a Lock of uniform width the entire length of sheet, even if there is a variation in the hardness of the material, has an Adjustable Gauge for locks from 1/4 to 3/8 inches.

	Each
No. 30N—30 in.; Weight 90 Lbs..	$40 00

WRIGHT IMPROVED

Turns Locks 1/4, 5/16, 1/2 and 5/8 in.; By use of Rod and Steel Strips under the Plate, Wider Locks May be Turned and Sheets Longer than the Machine used; Will also Fold Straight Sheets.

	Each
No. 30W—30 in. Wide; Complete with Attachment	$39 00

Weight 80 Lbs. Each

NIAGARA KEYSTONE BAR FOLDERS

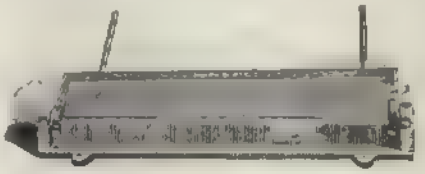
For folding Tin and other light materials up to 24 Gauge; Folds narrow or wide locks at various angles, forms square joints and turns rounded edges ready to insert a wire; the Gauge is adjustable by means of a Knob allowing Gauge to be quickly set without measuring or trying.

Nos.	Width	Turns Locks	Weight	Each
21K	21 in.	1/4 to 1	125 Lbs	$80 00
30K	30 in.	1/4 to 1	230 Lbs.	90.00

WOOD ROOFING FOLDERS

Improved, with Gauge, Hinged Wood Wings, Steel Blades; Iron carrying Handle; For Flat Seam Tin Roofing.

	Each
No. 20—For 20 in. Tin; Wt. 7½ Lbs	$9.50
No. 30—For 30 in. Tin; Wt. 15 Lbs	11.50



HEAVY SHEET IRON FOLDERS

For 20 Gauge Material and Lighter; a strong accurate machine with Adjustable Gauge.

Nos.	Width	Turns Locks	Weight	Each
130	30 in.	¼ to 1	190 Lbs.	$ 70 00
142	42 in.	¼ to 2	390 Lbs.	120.00
148	48 in.	¼ to 2	450 Lbs.	140.00

Not carried in Stock; Shipped Direct from Factory

NIAGARA WAUGH CIRCLE SHEARS

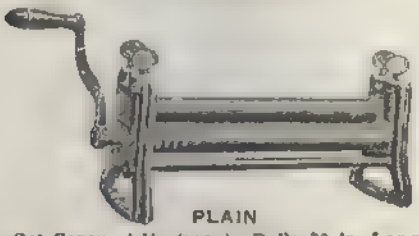
For 22 Gauge Material or lighter; Will cut round discs of sheet steel and can also be used for straight cutting.

Nos.	Will Circle	Cutting Head	Weight	Each
1	3 to 15 in.	9¾ in.	100 Lbs	$66 00
2	3 to 20 in.	9¾ in.	110 Lbs.	72 00
4	3½ to 48 in.	9¾ in.	310 Lbs	130 00

Not carried in Stock; Shipped Direct from Factory

STOVE AND TIN PIPE FORMERS

For forming light Sheet Metal into Cylindrical Shapes; Smooth Steel Rolls without indentations or imperfections.



PLAIN

Set Screw Adjustment; Rolls 30 in. Long

	Each
No. 1P—1¾x30 in. Rolls, Weight 118 Lbs.	$38.00
No. 2P—2 x30 in Rolls, Weight 140 Lbs	42.00

Slip Roll

End of Upper Roll can be lifted out and is held suspended while finished work is being removed.

	Each
No. 1S—1¾x30 in. Rolls; Weight 140 Lbs.	$44.00
No. 2S—2 x30 in. Rolls; Weight 160 Lbs.	48.00

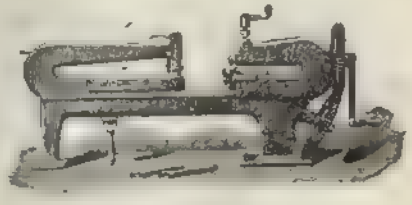
SQUARING SHEARS

With Iron Drop Tables

For Squaring, Stripping and Cutting Sheets, either Square or at any desired angle without marking the sheets.

	Each
No. 15S—Width of Cut 30 in.; Complete with Front, Bevel and Side Gauges, also Micrometer Back Gauge; the Bed is marked with a Graduated Scale in 1/16 inches	$100.00

Weight 530 Lbs Each



NIAGARA RING AND CIRCLE SHEARS, IMPROVED

Capacity 22 Gauge Material and lighter; Cuts internal Holes or Circles without cutting through edge of sheet; can be used for straight cutting.

Nos.	11	13
Depth Throat, In.	9	9
Depth Circle Arm, In.	16	30
Will Circle from, In.	3½ to 22	3½ to 40
Weight, Lbs.	180	250
Each	$90 00	110 00

Not carried in Stock; Shipped Direct from Factory

TINNERS' STAKES

Wrought Iron Stake, Polished Steel Faces

DOUBLE SEAMING STAKES

Both Arms Round and Polished; With Flat Faced, Beveled Elliptical Ends

For Small Ware, such as Coffee Boilers, etc., where a Special Bevel is required

	Each
No. 1D—Long Arm 17 in., with 3⅜x1⅛ in. End; Short Arm 12 in. with 3-8x2 in. End; Weight 42 Lbs.	$28.00
No. 2D—Each Arm, 11 in. Long 3⅛x1⅝ in. and 2¾x1½ in. Ends; Weight 38 Lbs. Each	24.00

Not Carried in Stock; Will order Special

BEAKHORN STAKES

One Arm Flat, with 2 in. Face, the Other Round and Tapering

For Forming Long Square Work and all Round Stuff; Double Seaming, Square Boxes, etc.

Nos.	1	2	4
Length Sq. Arm, In...	20	19	18
Length Rd. Arm, In...	18	17½	16½
Wt. Each, Lbs.	50	40	30
Each	$34.00	30 00	26.00

Open Stock

No. 1, not carried in Stock; Will order Special

BLOWHORN STAKES

One Arm Round, Long and Tapering; The Other Arm Oval Faced and Tapering

Large End for forming Covers, Small End for Cylinders, Taper Tubes, Dinner Horns, etc.

	Each
Large Arm 9 in., Small Arm 17½ in. Long; Weight 14 Lbs. Each	$12 00

SQUARE HEAD STAKES

For Square Work, Double Seaming Bottoms, etc.

	Each
Face 2⅝x4½ in.; Weight 11 Lbs.	$9.00

HATCHET STAKES

For Seaming Pitched Covers, Round or Square; Turning Seams when Folder cannot be used, etc.

Nos.	1	2	3	4	5
Blade, In.	16	14½	13	11	9
Wt. Ea., Lbs.	16	14	13	11	9
Each	$11.00	10.00	9.00	8.00	7 00

CANDLE MOULD STAKES

Both Arms Round and Tapering

For Turning and Seaming Small Cylinders, Tapering Tubes, Rings, etc.

	Each
Long Arm 18 in., Short Arm 8⅛ in.; Weight 8 Lbs. Each	$9.00

NEEDLE CASE STAKES

One Arm Square, the Other Round; Both Tapering

For Forming Smallest Tubes, Small Rings, Square Stuff, etc.

	Each
Square Arm 8 in., Round Arm 10⅛ in. Long; Weight 5 Lbs. Each	$8.00

CREASING STAKES

For Hand Creasing, Wiring and Square Work, etc.

	Each
Length 14¼ in.; Wt. 13 Lbs. Each	$14.00

Open Stock

CREASING STAKES WITH HORN

For Hand Creasing, Wiring, Forming Small Tubes and Square Work

	Each
Round Arm 9½ in., Square Arm 6½ in. Long; Weight 13 Lbs. Each	$15 00

Cast Iron Stakes, Polished Steel Faces

ROUND HEAD STAKES

For Riveting Handles on Covers, etc.

	Each
Diameter Head 2¾ in., Length 15½ in.	$4.00

Weight 10 Lbs. Each

CONDUCTOR STAKE

Cast Iron, Polished Arms or Faces; Both Arms Round

For Locking Seams of Conductor Pipe

	Each
No. 1C—Large Arm 15x2¼ in., Small Arm 11½x1¾ in.; Weight 30 Lbs. Each	$9.50
No. 2C—Large Arm 14x1⅝ in., Small Arm 10x1¼ in.; Weight 20 Lbs. Each	8.50

No. 2C, not carried in Stock; Will order Special

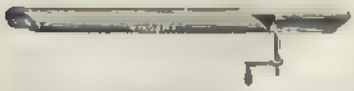
No. 4—DOUBLE SEAMING STAKES

For Double Seaming All Kinds of Work

	Per Set
With Four Heads, 1 Flat Faced Round Head 6 in. Diam., 1 Round Faced Oblong Size 5¾x4 in., 1 Flat Faced Square, Size 5x4¾ in.; 1 Oval Faced Oblong, Size 9½x3 in.; Size Arm 22x4 in. Square; All Heads Will Fit in End or Top Side of Arm	$21.00

One Set in a Box; Weight 100 Lbs. Each

TINNERS' STAKES AND TONGS



Cast Iron
Polished Faces

HOLLOW MANDRELS

A Bench Mandrel for general purposes, Forming, Riveting, Seaming, etc.; can be swung and secured in any position on bench most favorable to light or work

	Each
No. 040—40 in. Long; Flat Face 6 in. Wide, Round Face 4 in. Wide; Weight 50 Lbs. Each	$13.00

Open Stock

SOLID MANDRELS

For Heavy Riveting, Seaming Small Pipe, etc.

Reversible, One Flat and One Round Face

	Each
No. 0—40 in. Long to Standard; Weight 80 Lbs. Each	$14 00
No. 1—34 in. Long to Standard; Weight 60 Lbs. Each	12.00

Open Stock

ADAMS STOVE PIPE MANDRELS

For Forming and Seaming Stove Pipe; Just the Thing for a Small Dealer or one who does not have a regular tin shop

	Each
No. 36—36 in. Long, 4½ in. Wide, With Heavy Saddle to Attach to Bench and Pound Upon	$8 00

One in a Box; Weight 40 Lbs. Each, Boxed

BENCH PLATES

Cast Iron, Polished

With Square, Round and Oblong Socket Holes; will take all Stakes shown on preceding pages, also Swedges and Formers

To be set in flush with surface of Bench; Anchor with four ½ in. Square Head Plow or Machine Bolts

	Each
No. 1—37x8 in., 16 Holes; Weight 50 Lbs.	$12.00
No. 2—30x8 in., 16 Holes; Weight 30 Lbs.	9.50

Open Stock

BURRIT ROOFING DOUBLE SEAMERS

Seamers are so made as to bend the edge down further than at right angle, to facilitate the closing down operation. The Seamers do not crimp the tin, leaving the locks of uniform height.

They will double seam hips and ridges with ease, and seaming can be done much faster, easier and better than by hand and mallet.

	Per Set (2 Pairs)
No. 60—Common Gauge; to follow 1 and 1¼ in Tongs, Finished Seam ¾ in. High	$29 00
No. 70—Wide Gauge; to follow 1⅝ and 1½ in Tongs, Finished Seam 1 in High	29.00

Weight 42 Lbs per Set

The Seamers are fitted for IC Tin, unless specially ordered for IX Tin, in which case they will be made to follow 1¼ and 1⅛ in. Tongs

HAND ROOFING DOUBLE SEAMERS

Used in places on roof not accessible with Burritt or Other Seaming Tongs

	Per Set of 2
No. 18—One End 1¼x1 in., the Other 1½x1¼ in.; Two Pieces like the Illustration make a Set	$5.00

Weight 18 Lbs. per Set

NIAGARA ADJUSTABLE GUTTER BEADERS

Adjustable for Rods from ⅝ to ¾ in Diam.; When Bead is formed the Jaws can be quickly opened to remove the work

	Each
No. 30—30 in.; Weight 65 Lbs	$25 00
No. 42—42 in.; Weight 90 Lbs	35 00

Price includes One Straight Rod; State diameter wanted. Not carried in Stock, Shipped Direct from Factory.

STEEL ROOFING TONGS

Length of Blades 18 in.

	Per Set (2 Pairs)
No. 11—Common Gauge, 1 and 1¼ in.	$10 00
No. 13—Wide Gauge, 1¼ and 1½ in.	10 00

Weight 17 Lbs. per Set

ADJUSTABLE ROOFING TONGS

Will do the same work as six ordinary Roofing Tongs and their cost is but slightly higher; The adjustment is made by removing the Pins on each side of the Tongs and screwing them into the proper holes corresponding with the size of Standing Roof Seam to be produced.

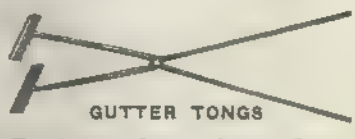
	Per Pair
No. 19—13 in. Blades; will fold edges of ⅛, ¾, 1, 1¼, 1½ and 2 in.	$8 00

Weight 8⅛ Lbs. Each

SQUEEZING TONGS

	Each
No. 17—Squeezing Tongs; Weight 17 Lbs.	$3.10

Used in Squeezing Seams on Roll Cap and Pressed Standing Seam Roofing

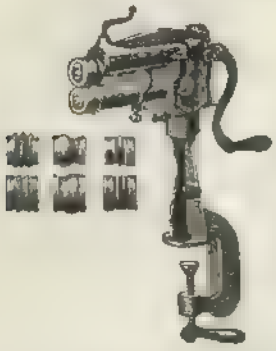


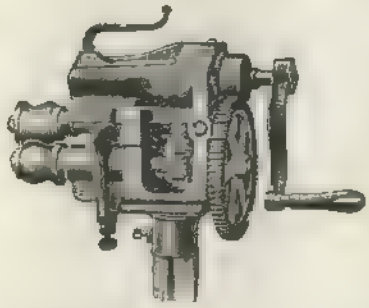
GUTTER TONGS

For Turning up Gutter, Square Pans, etc., for Tin and light Sheet Iron not heavier than No. 24 Gauge

	Per Pair
No. 15—14 in. Blades; Weight 8 Lbs per Pair	$8 00

TINNERS' BENCH MACHINES





NIAGARA BEADING MACHINES

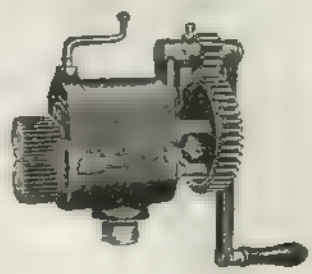
For Ornamenting and Strengthening Tinware, Sheet Metal and Galvanized Work

Each

No. 4—Beads 26 Gauge material and lighter; Sizes of Beads, ⅝ in. O. G., ⅝ in. Triple, ⅛ in. Triple Coffee Pot and ¼ in. Single; 5 in. Throat; Complete with Four Pairs of Rolls and Standard; Weight 50 Lbs....$44.00

No. 02½—Beads 16 Gauge material and lighter; will bead up to 4 in. from the edge of the sheet; Complete with One Pair of 2½ in. O. G. Rolls and Standard; Weight 135 Lbs...$70 00

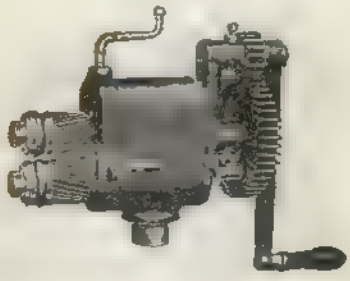
No 02½ not carried in Stock; Shipped Direct from Factory

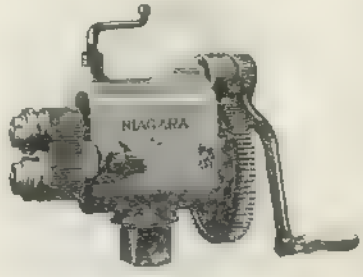


CORNICE MAKERS CRIMPERS

For crimping and contracting the end of Pipe so that lengths will fit together easily; Shafts do not extend beyond the end surface of the crimping Rolls; this allows the operator to crimp close up to a bend; Back Gear Permits Two Speeds, for Light and Heavy Work.

No. 1—Buffalo; Crimps 22 Gauge material and lighter; complete with Standard; Weight 57 Lbs Each.$32.00





CRIMPING AND BEADING MACHINES

For Crimping and Beading the end of Pipe so that lengths will fit together easily, the relative depth of the crimp and bead is easily regulated, that is a deep crimp and a shallow bead can be made or vice versa or both can be made uniform; Adjustment is made by Wing Nuts near the Handle.

Each

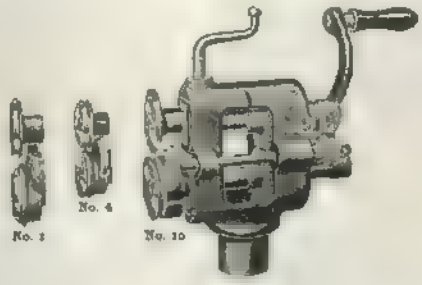
No. 20—Buffalo; for 20 Gauge material and lighter; can be operated with back gear for heavy material or direct for faster or lighter work. Complete with Beading Rolls, one pair of Plain Collars and Standard; Weight 60 Lbs. Each.....$32.00

HEAVY, GEARED

Not Carried in Stock

Each

No. 400—Niagara; for 18 Gauge material and lighter; Complete with Beading Rolls, one pair of plain Collars and Standard; Weight 125 Lbs. Each $90 00



BUFFALO ELBOW EDGING MACHINE

For Making Circular Joints of Elbows

Machine can be equipped with these Faces by ordering special from factory; Regular stock will be shipped, if not ordered otherwise.

Faces No. 4 are used for Inside and Outside Edges of Riveted Elbows, with Tight or Loose Joint.

Faces No. 1 can be used for Outer Edge of Riveted or Grooved Elbows; the Inner Edge is turned on a Burring Machine.

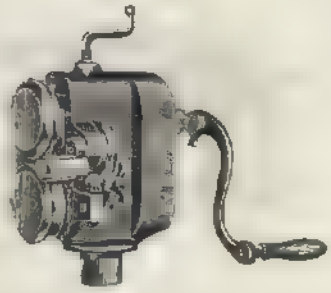
No. 104—Buffalo; Complete with One Pair of No. 10 Faces, producing V shaped Creases on both Elbow Sections $28.00

Weight 33 Lbs. Each

Faces No. 10 are most commonly used

TINNERS' BENCH MACHINES

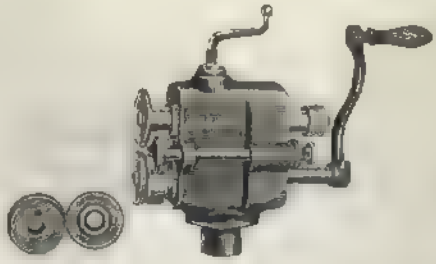
These Machines are so constructed that the Upper Face will go over Seams without causing strain or breakage

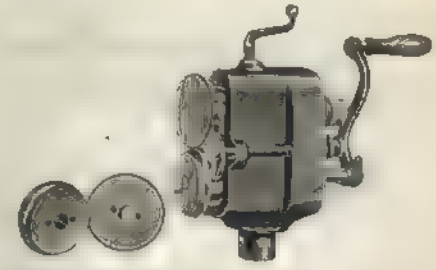


Wiring Machines follow the Turning Machines and press the edge of the material over the wire, for tin and light material not heavier than 24 Gauge.

Each

No. 41—Encased; Complete with Standard; Weight 38 Lbs. Each.....$38.00





SUPERIOR ENCASED TURNING MACHINES

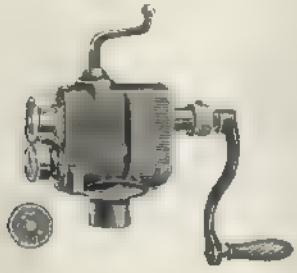
Used for turning the edges of flat sheets to receive the wire; Tool Steel Gauge; Removable Faces, Interchangeable Parts; Complete with Standard and Extra Upper and Lower Faces

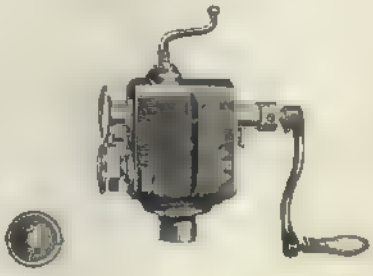
Each

No. 21—Small; Weight 34 Lbs.....$34.00

Each

No. 31—Large; Weight 38 Lbs..... $35.00





SUPERIOR BURRING MACHINES

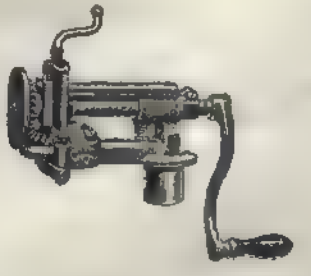
For turning up edges on flat sheets, cylindrical work, etc.

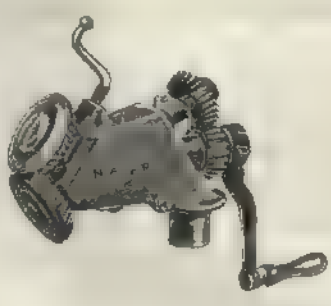
Each

No 51—Small Encased; for Tin and Other Material not heavier than 24 Gauge, Complete with Standard and Extra Upper and Lower Faces, Weight 28 Lbs. Each $31.00

Each

No. 61—Large Encased; for Tin and Other Material not heavier than 24 Gauge; Complete with Standard and Extra Upper and Lower Faces; Weight 32 Lbs. Each.....$32 00





SETTING DOWN MACHINES

These Machines follow the Burring Machines and press the edge of the bottom on to the flange of cylindrical bodies of cans and similar work; For Tin and Light Material not heavier than 24 Gauge.

NIAGARA

Each

No. 71 -For Seams up to $\frac{1}{8}$ in Wide; Complete with Standard; Weight 28 Lbs. Each.....$28.00

SUPERIOR

Seam can be started inward, while setting it down; the work can be held up or down, this is an advantage over the Niagara.

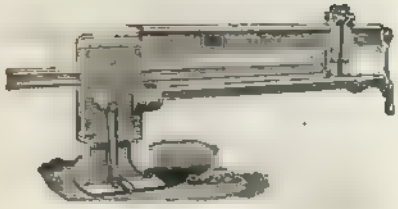
Each

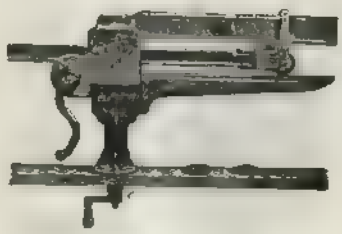
No. 81 For Seams up to $\frac{1}{8}$ in Wide, Complete with Standard $34 00

Weight 35 Lbs. Each

All Above, One in a Box

TINNERS' MACHINES





GROOVING MACHINES

For compressing or locking the folded seams on straight sheets or cylindrical vessels

NIAGARA

Grooves and flattens the seam without the use of a hand mallet; The Reversible Horn permits of grooving 3 in. Diam. and larger; the groove can be pressed toward the inside or outside of the work; two flat and three grooved Rolls, with Grooves 3/16, 1/4 and 1/8 in. wide, accompany each machine; Width of grooves in Round Horn 3/16, 1/4, 5/16 and 1/8 in.

For 24 Gauge material and lighter.

Nos.	Length	Weight	Each
220	20 in.	170 Lbs.	$50.00
230	30 in.	195 Lbs.	70 00
236	36 in.	215 Lbs.	84 00

Not carried in Stock; Shipped Direct from Factory

QUEEN CITY; Round Horn

Grooves and flattens the seams without the use of a mallet; The Reversible Horn permits of grooving 3 in. Diam. and larger, the groove can be pressed toward the inside or outside of the work; Geared for two speeds

Each

No. 30—30 In. Long; For 24 Gauge material and lighter; complete with two flat and four Grooved Rolls with grooves 3/16, 1/4, 5/16 and 3/8 In. Wide; Width of grooves in Round Horn 3/16, 1/4, 5/16 and 3/8 in.; Weight 170 Lbs. Each.....$80 00

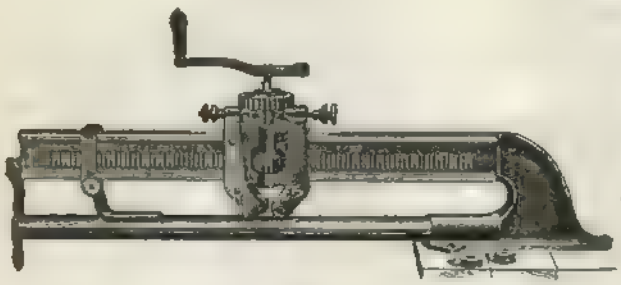
Not carried in Stock; Shipped Direct from Factory

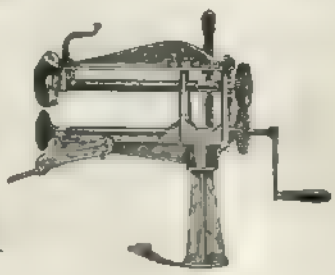
BUFFALO

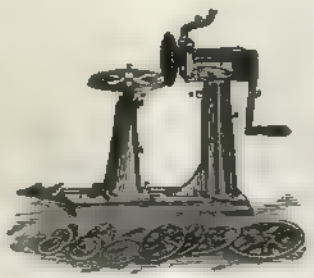
Each

No. 20—20 In. Long; For 24 Gauge material and lighter; Equipped with Anti-Friction Roller which takes the upward pressure, runs in an Oil bath; Complete with three Grooved Rolls, 3/16, 1/4 and 1/8 in. Wide; Detachable Standard $36 00

Weight 100 Lbs. Each







HEAVY GROOVING MACHINES

QUEEN CITY, GEARED

For Heavy Work; The Traveling Carriage has two Rolls, One for Grooving followed by a Flattening Roll which tightens the seam; it presses the groove toward the inside or outside of the work; can be run direct instead of geared when grooving light material; Complete with two Flat and three Grooved Rolls, with grooves 1/4, 3/16 and 5/16 in. Wide; For 20 gauge material and lighter

Each

No. 336—Length 36 In.; Diam. of Horn 2¾ in.; Weight 345 Lbs. Each..$130.00

No. 348—Length 48 in.; Diam of Horn 3¼ in.; Weight 440 Lbs..... 170 00

Not carried in Stock; Shipped Direct from Factory

DOUBLE SEAMERS

For double seaming round bottoms on to Cylindrical vessels

MOORE

Best adapted to ordinary wants of tinners

Each

No. 3—For Coffee Pots and small work; Diam. of Lower Face 3 in.; Depth of Throat 10 in.; Weight 70 Lbs.$50.00

No. 2—Diam. of Lower Face 4 in.; Depth of Throat 13 in.; Weight 80 Lbs. 66.00

No. 1—Diam. of Lower Face 4½ in.; Depth of Throat 15 in.; Weight 100 Lbs. 70.00

Not carried in Stock; Shipped Direct from Factory

HULBERT'S

Adapted to all Kinds of Flaring and Straight Work, as Coffee and Tea Pots, Oval and Round Boilers, etc. Can be used on Metal up to 26 Gauge.

With 10 Discs and Three Faces; Five Flaring Discs 4½, 6¼, 7⅛, 8⅞, 11½ In. Diam.; Four Straight Discs 4¼, 5¾, 8⅛ and 10¼ In. Diam.; One Oval Edge Disc 5⅞ In. Diam.

Each

No. 1H—With Deflector; This Machine deflects the Ware after it is seamed, adding strength and Rigidity; For work up to 20 inches high; Weight 180 Lbs. $80.00

No. 2H—Without Deflector; For work up to 14 inches high; Weight About 125 Lbs. Each..... 76.00

Not carried in Stock; Shipped Direct from Factory

All Above, One in a Box

TINNERS' TOOLS

TINNERS' HAND GROOVERS

For Grooving Stove Pipe or Other Work

Nos.	00	0	1	2
Width Groove, In.	⅛	7/64	3/16	5/16
Width Face, In.	11/16	3/4	3/4	11/16
Wt. Each, Lbs.	1¾	1⅛	1⅛	1
Each	$1 20	1 20	1.02	1 02
Nos.	**3**	**4**	**5**	**6**
Width Groove, In.	¼	9/32	5/16	3/8
Width Face In.	11/16	5/8	5/8	5/8
Wt Each, Lbs.	1	¾	⅔	⅝
Each	$0 81	81	63	63

Open Stock

TINNERS' SETTING HAMMERS

Solid Cast Steel, Polished; Second Growth Hickory Handle

The Pein in this style Hammer is particularly adapted to Setting in Bottoms. The Square Hammer Face for riveting, punching or any regular work.

Nos.	1TS	2TS	3TS	4TS
Size Face, In Square	¾	⅞	1	1⅛
Weight Dozen, Lbs	10	13	18	22
Per Dozen	$6 00	6.25	6 75	7.25

Weights Include Handle; Half Dozen in a Box

TINNERS' RAISING HAMMERS

Cast Steel, Polished Faces; Second Growth Hickory Handle

For Blocking out Bottoms, Covers, or any kind of Raised Work

Nos.	1	2	3	4
Diam. Small Face, In.	1⅝	1½	1⅜	1¼
Diam. Large Face, In.	2¼	2⅛	1¾	1⅝
Weight Each, Lbs.	4½	3¼	2¼	1½
Each	$4.50	3.50	2.50	1.50

Open Stock

MAGIC PATTERN RULE AND CHART

One of the Greatest Labor Saving Tools Ever Invented in the Interest of Tinners and Sheet Metal Workers

*Per Set

Magic Pattern Rule and Pattern Chart, Complete, in Hinged Wooden Case $10.00

The Magic Pattern Rule consists of a Nickel Plated steel bar 4 ft. long, 7-16 in. square, marked in circumference inches on the front and in inches and eighths on the back, and two slides with set screws into which trammel points are fastened. For laying out elbow patterns, the left hand slide is fastened to the end of the bar by the set screw and the right hand slide is set the diameter of elbow wanted. A flexible steel ribbon on the top of bar is then raised to the required height, according to angle of elbow wanted, one glance at the chart gives height necessary for the elbow required

One in a Wood Box; Weight 6½ Lbs. Each, Complete

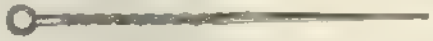
HURWOOD TINNERS' AWLS

Used for Marking out Work, Punching Damper Holes in Pipe, etc.

Per Dozen

No. 7—6¼ in. Long, Black Wood Handle, 1⅝ in. Diam., 1 in. Polished Steel Ferrule, Crucible Cast Steel Shank Passes Through Ferrule and Handle, Forming ⅛ in. Square Hammer Head for Rough Work Will not Break nor Turn on the Point $4.80

Half Dozen in a Box; Weight 2½ Lbs. per Dozen



TINNERS' SCRATCH AWLS

Used for Marking or Punching Tin, Sheet Steel, etc.

Per Dozen

No. 17 -8½ in. Solid Cast Steel; Twisted Shank, Loop End... $2 50

One Dozen in a Box. Weight 1 Lb. per Dozen

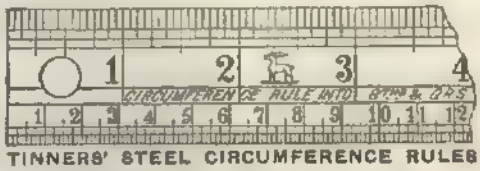
TINNERS' RIVETING HAMMERS

Solid Cast Steel, Polished; Second Growth Hickory Handle

With Rounded Cross Pein for Stretching Metal and for Setting Work, will not mar the Metal The Flat Face is used for all kinds of work.

Nos.	1TR	2TR	3TR
Size Face, In.	¾	⅞	1
Weight Dozen, Lbs	12	14	16
Per Dozen	$6 00	6 25	6 75

Weights Include Handle Half Dozen in a Box



TINNERS' STEEL CIRCUMFERENCE RULES

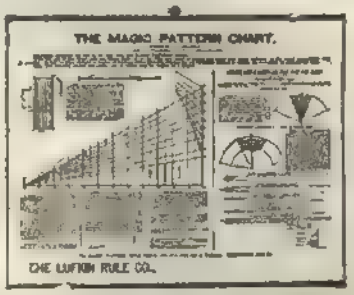
Length 3 Feet, Width 1¼ In., 16 Gauge Steel *Each

No. 95—Polished Steel $5.00

No. 95N—Nickel Plated Steel 6.00

One Side gives Dimensions of Measures of various Capacities, Liquid Measure—Flaring, ½ Pt. to 5 Gal., Dry Measure—Flaring, ¼ Bu. to 2 Bu.; Cans—Pitched Top, 1 Gal. to 10 Gal.; Cans—Flat Top, 1 Gal. to 200 Gal. (31 Sizes), Dry Measure—Straight, 1 Qt. to 3 Bushels, Opposite Side, Circumference Rule, Top Edge marked in Inches, divided into 10ths, Lower Edge marked to show number of inches in circumference of a circle of any diameter marked on top edge; (shown in illustration) for example, opposite 1 in. on top edge, is found 3 and a fraction of an inch (3 1416) on lower edge which means a circle of 1 in. Diam is 3 1416 in. in circumference and so on the entire length of rule

Wrapped One in a Paper, Weight ⅞ Lb. Each



MAGIC PATTERN CHARTS

With Elbow Diagram and Rules for Cutting all Kinds of Flaring, Oval, Cylindrical, Cone Shaped Vessels, etc. *Each

Linen, 19x23 in $1.00

One in a Tube; Weight 2 Oz.

WAKEFIELD INTERCHANGEABLE FIXTURES

ONE LIGHT PENDANTS

No. 1210

No. 1211

No. 1212

No. 1010

No. 1011

No. 1012

ELECTRIC

No. 1210 PENDANT

Length 30 in.; ⅜ in. Tubing; Diameter of Canopy 4½ in., Depth 4 in.

	Each
No. 1210-BB—Brushed Brass Finish	$1.10
No. 1210-OC—Oxidized Copper Finish	1.10

Weight 11 Oz. Each

No. 1121 PENDANT

Length 30 in.; ⅜ in. Tubing; Diameter of Canopy 4½ in., Depth 4 in.

	Each
No. 1211-BB—Brushed Brass Finish	$1.40
No. 1211-OC—Oxidized Copper	1.40

Weight 13 Oz. Each

No. 1212 PENDANT

Length 30 in.; ⅜ in. Tubing; Diameter of Canopy 4½ in., Depth 4 in.

	Each
No. 1212-BB—Brushed Brass Finish	$1.70
No. 1212-OC—Oxidized Copper Finish	1.70

Weight 14 Oz. Each

Note—Prices do not include Sockets, Glassware or Trimmings as shown by above cuts.

GAS

No. 1010 PENDANT

⅜ in. Tubing; Diameter of Canopy 4½ in., Depth 4 in.

24 in. Pendant	Each
No. 1010-24BB—Brushed Brass Finish	$1.10
No. 1010-24OC—Oxidized Copper Finish	1.10
30 in. Pendant	
No. 1010-30BB—Brushed Brass Finish	1.25
No. 1010-30OC—Oxidized Copper Finish	1.25

Weight 14 Oz. Each

No. 1011 PENDANT

½ in. Tubing; Diameter of Canopy 4½ in., Depth 4 in.

24 in. Pendant	Each
No. 1011-24BB—Brushed Brass Finish	$1.40
No. 1011-24OC—Oxidized Copper Finish	1.40
30 in. Pendant	
No. 1011-30BB—Brushed Brass Finish	1.55
No. 1011-30OC—Oxidized Copper Finish	1.55

Weight 1 Lb. Each

No. 1012 PENDANT

⅝ in. Tubing; Diameter of Canopy 4½ in., Depth 4 in.

24 in. Pendant	Each
No. 1012-24BB—Brushed Brass Finish	$1.70
No. 1012-24OC—Oxidized Copper Finish	1.70
30 in. Pendant	
No. 1012-30BB—Brushed Brass Finish	1.85
No. 1012-30OC—Oxidized Copper Finish	1.85

Weight 1 Lb. Each

Note—Prices do not include Glassware or Trimmings as shown by above cuts, but do include the Pillar Cocks.

WAKEFIELD INTERCHANGEABLE FIXTURES

COMBINATION PENDANTS AND WALL BRACKETS

COMBINATION PENDANT

Length Pendant 36 in.; ⅜ in. Casing. Diameter of Canopy 4½ in., Depth 4½ in.

	Each
No. 1400-BB—Brushed Brass Finish..	$1.90
No. 1400-OC—Oxidized Copper Finish .	1.90

Weight 1¾ Lbs. Each

COMBINATION PENDANT

Length Pendant, 36 in ; ⅜ in. Casing; Diameter of Canopy 4½ in., Depth 4½ in.

	Each
No. 1411-BB—Brushed Brass Finish...	$2 25
No. 1411-OC Oxidized Copper Finish..	2.25

Weight 1¾ Lbs. Each

COMBINATION PENDANT

Length Pendant 36 in.; ⅞ in. Casing; Diameter of Canopy 4½ in.; Depth 4½ in.

	Each
No. 1402-BB—Brushed Brass	$2.50
No. 1402-OC—Oxidized Copper Finish..	2 50

Weight 2 Lbs. Each

COMBINATION WALL BRACKET

Extends 7 in. from Wall; Diameter of Canopy 4½ in., Depth 3½ in.; 3¼ in. of ⅜ in. Casing

	Each		Each
No. 1401-BB—Brushed Brass	$0.90	No. 1401-OC—Oxidized Copper	$0.90

Weight 10 Oz. Each

Note—Prices do not include Sockets, Glassware or Trimmings as shown by above cuts

WAKEFIELD INTERCHANGEABLE FIXTURES

SUGGESTIONS FOR NEW COMMERCIAL STEMS NOS. 615 AND 715

ELECTRIC

PLATE No. 715H

PLATE No. 615C

Length 36 In., Spread 23 In.
Composed of Stem No. 615 and Arms No. 238

TWO LIGHT (TWO ARMS)

	Each
No. 615C-2BB—Brushed Brass	$5.00
No. 615C-2OC—Oxidized Copper	5.00

Weight 4¾ Lbs. Each

THREE LIGHT (THREE ARMS)

No. 615C-3BB—Brushed Brass	$5.75
No. 615C-3OC—Oxidized Copper	5.75

Weight 5 Lbs. Each

FOUR LIGHT (FOUR ARMS)

No. 615C-4BB—Brushed Brass	$6.50
No. 615C-4OC—Oxidized Copper	6.50

Weight 5¼ Lbs. Each

PLATE No. 715H

Length 24 In., Spread 23 In.
Composed of Stem No. 715, Arms No. 238 and Terminal Couplings No. 1233

TWO LIGHT

Two Arms and Two Pair Terminal Couplings

	Each
No. 715H-2BB—Brushed Brass	$6.80
No. 715H-2OC—Oxidized Copper	6.80

Weight 7¼ Lbs. Each

THREE LIGHT

Three Arms and Three Pair Terminal Couplings

No. 715H-3BB—Brushed Brass	$6.70
No. 715H-3OC—Oxidized Copper	6.70

Weight 3¾ Lbs. Each

FOUR LIGHT

Four Arms and Four Pair Terminal Couplings

No. 715H-4BB—Brushed Brass	$7.60
No. 715H-4OC—Oxidized Copper	7.60

Weight 4¼ Lbs. Each

PLATE No. 615B

Length 36 In., Spread 23 In.
Composed of Stem No. 715 and Arms No. 239

TWO LIGHT (TWO ARMS)

	Each
No. 615B-2BB—Brushed Brass	$4.80
No. 615B-2OC—Oxidized Copper	4.80

Weight 4¾ Lbs. Each

THREE LIGHT (THREE ARMS)

No. 615B-3BB—Brushed Brass	$5.45
No. 615B-3OC—Oxidized Copper	5.45

Weight 5 Lbs. Each

FOUR LIGHT (FOUR ARMS)

No. 615B-4BB—Brushed Brass	$6.10
No. 615B-4OC—Oxidized Copper	6.10

Weight 5¼ Lbs. Each

For Bottom Light add 15c to above

Note—Prices do not include Sockets, Glassware or Trimmings

WAKEFIELD INTERCHANGEABLE FIXTURES

SUGGESTIONS FOR STEMS 712, 713, 714 AND 612

PLATE No. 712A

Length 24 in., Spread 20 in.
Composed of Stem No. 712 and Arms No. 225

TWO LIGHT (TWO ARMS)

	Each
No. 712A-2BB—Brushed Brass	$6 40
No. 712A-2OC—Oxidized Copper	6.40

Weight 3½ Lbs. Each

FOUR LIGHT (FOUR ARMS)

No. 712A-3BB—Brushed Brass	7 80
No. 712A-3OC—Oxidized Copper	7.80

Weight 4 Lbs. Each

PLATE No. 712A

PLATE No. 612X

Cut shown in center at bottom of page

Four Light

Two Electric and Two Candle

Composed of following parts

1 No. 612 Stem
4 No. 225 Arms
2 No. 2006 Candle Holders complete with Candles

No. 612X-BB—Brushed Brass	$8.22
No. 612X-OC—Oxidized Copper	8.22

Weight 5½ Lbs. Each

PLATE No. 713B

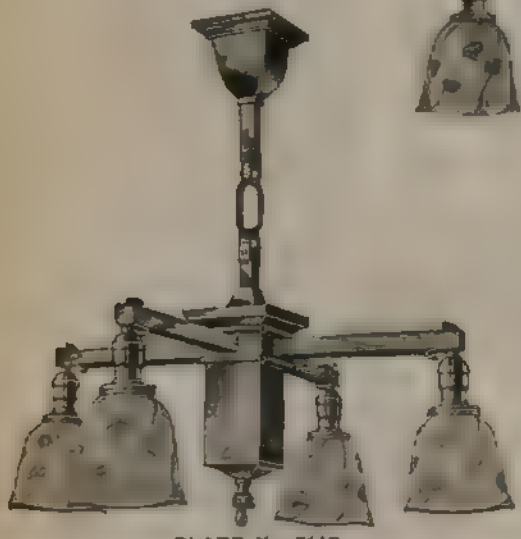


PLATE No. 714B

Length 24 in., Spread 20 in.
Composed of Stem No. 714 and Arms No. 225

TWO LIGHT (TWO ARMS)

No. 714B-2BB—Brushed Brass	$7.90
No. 714B-2OC—Oxidized Copper	7.90

Weight 4½ Lbs. Each

FOUR LIGHT (FOUR ARMS)

No. 714B-4BB—Brushed Brass	$9.30
No. 714B-4OC—Oxidized Copper	9.30

Weight 5 Lbs. Each

PLATE No. 612X

Length 24 in., Spread 20 in.
Composed of Stem No. 713 and Arms No. 225

TWO LIGHT (TWO ARMS)

	Each
No. 713B-2BB—Brushed Brass	$6.90
No. 713B-2OC—Oxidized Copper	6.90

Weight 3½ Lbs. Each

FOUR LIGHT (FOUR ARMS)

No. 713B-4BB—Brushed Brass	$8.30
No. 713B-4OC—Oxidized Copper	8.30

Weight 4 Lbs. Each

For prices see upper right hand corner

Note—Prices do not include Sockets, Glassware or Trimmings

WAKEFIELD INTERCHANGEABLE FIXTURES

SUGGESTIONS FOR STEMS NOS. 612, 613 AND 614

ELECTRIC

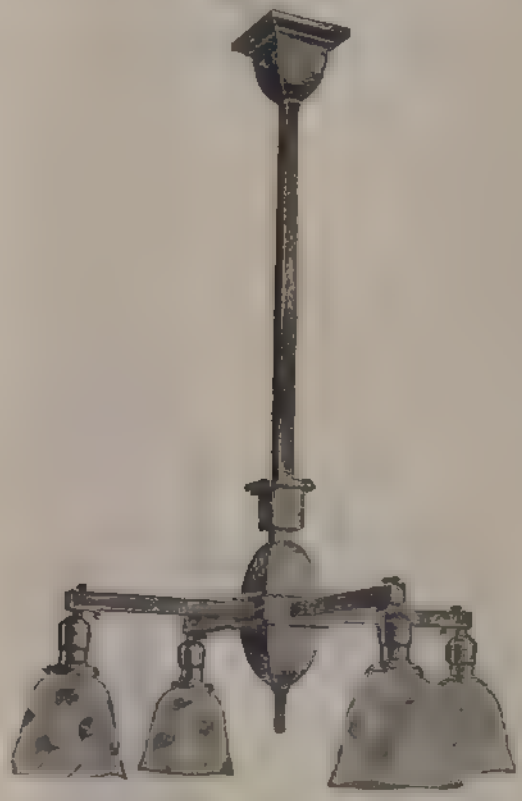


PLATE No. 613A

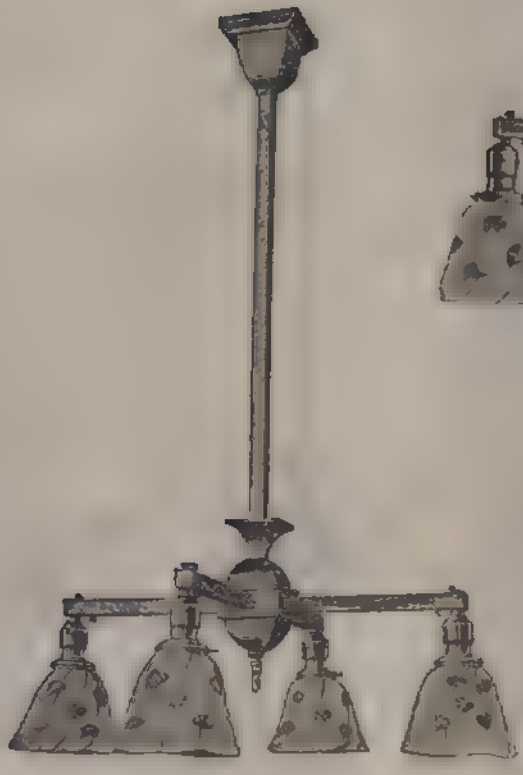


PLATE No. 612A

Length 36 In., Spread 20 In.
Composed of Stem No. 612 and Arms No. 225

TWO LIGHT (TWO ARMS)

	Each
No. 612A-2BB—Brushed Brass	$5.90
No. 612A-2OC—Oxidized Copper	5.90

Weight 4¾ Lbs. Each

FOUR LIGHT (FOUR ARMS)

No. 612A-4BB—Brushed Brass	7.30
No. 612A-4OC—Oxidized Copper	7.30

Weight 5¼ Lbs. Each

PLATE No. 613A

Length 36 In., Spread 20 In.
Composed of Stem No. 613 and Arms No. 225

TWO LIGHT (TWO ARMS)

	Each
No. 613A-2BB—Brushed Brass	$6.40
No. 613A-2OC—Oxidized Copper	6.40

Weight 4¾ Lbs. Each

FOUR LIGHT (FOUR ARMS)

No. 613A-4BB—Brushed Brass	7 80
No. 613A-4OC—Oxidized Copper	7 80

Weight 5¼ Lbs. Each

PLATE No. 614B

Length 36 In., Spread 20 In.
Composed of Stem No. 614 and Arms No. 225

TWO LIGHT (TWO ARMS)

	Each
No. 614B-2BB—Brushed Brass	$7.40
No. 614B-2OC—Oxidized Copper	7.40

Weight 5¼ Lbs. Each

FOUR LIGHT (FOUR ARMS)

No. 614B-4BB—Brushed Brass	8.80
No. 614B-4OC—Oxidized Copper	8 80

Weight 5¾ Lbs. Each

Note—Prices do not include Sockets, Glassware or Trimmings

WAKEFIELD INTERCHANGEABLE FIXTURES

SUGGESTIONS FOR STEM NO. 608

ELECTRIC

PLATE No. 608X

PLATE No. 608I

Length 36 In., Spread 15 In.
Composed of Stem No. 608 and Arms No. 215

TWO LIGHT (TWO ARMS)

	Each
No. 608I-2BB—Brushed Brass	$4.95
No. 608I-2OC—Oxidized Copper	4.95

Weight 4¾ Lbs. Each

THREE LIGHT (THREE ARMS)

No. 608I-3BB—Brushed Brass	6.05
No. 608I-3OC—Oxidized Copper	6.05

Weight 5 Lbs. Each

FOUR LIGHT (FOUR ARMS)

No. 608I-4BB—Brushed Brass	7.15
No. 608I-4OC—Oxidized Copper	7.15

Weight 5¼ Lbs. Each

PLATE No. 608X

Length 36 In., Spread 15 In.

FOUR LIGHT

Two Electric and Two Candle

Composed of Stem No. 608, 4 Arms No. 221 and 2 No. 2006 Candle Holders, Complete with Candles.

	Each
No. 608X-4BB—Brushed Brass	$7.67
No. 608X-4OC—Oxidized Copper	7.67

Weight 5 Lbs. Each

PLATE No. 608A

Length 36 In., Spread 15 In.
Composed of Stem No. 608 and Arms No. 204

TWO LIGHT (TWO ARMS)

	Each
No. 608A-2BB—Brushed Brass	$3.45
No. 608A-2OC—Oxidized Copper	3.45

Weight 4¼ Lbs. Each

THREE LIGHT (THREE ARMS)

No. 608A-3BB—Brushed Brass	3.80
No. 608A-3OC—Oxidized Copper	3.80

Weight 4½ Lbs. Each

FOUR LIGHT (FOUR ARMS)

No. 608A-4BB—Brushed Brass	4.15
No. 608A-4OC—Oxidized Copper	4.15

Weight 4¾ Lbs. Each

Note—Prices do not include Sockets, Glassware or Trimmings

WAKEFIELD INTERCHANGEABLE FIXTURES

SUGGESTIONS FOR STEMS Nos. 608, 603 AND 600

ELECTRIC

PLATE No. 608N

Length 36 In., Spread 18 In.

FIVE LIGHT

Composed of Stem No. 608, 4 Arms No. 221, 1, 4-in. Globe Holder No. 1203 and 4, 3¼-in. Globe Holders No. 1204.

	Each
No. 608N-5BB—Brushed Brass	$8.55
No. 608N-5OC—Oxidized Copper	8.55

Weight 6 Lbs. Each

PLATE No. 603D

Length 36 In., Spread 18 In.

Composed of Stem No. 603 and Arms No. 211½

TWO LIGHT (TWO ARMS)	Each
No. 603D-2BB—Brushed Brass	$5.60
No. 603D-2OC—Oxidized Copper	5.60

Weight 4½ Lbs. Each

THREE LIGHT (THREE ARMS)	
No. 603D-3BB—Brushed Brass	6.40
No. 603D-3OC—Oxidized Copper	6.40

Weight 4⅞ Lbs. Each

FOUR LIGHT (FOUR ARMS)	
No. 603D-4BB—Brushed Brass	7.20
No. 603D-4OC—Oxidized Copper	7.20

Weight 5¼ Lbs. Each

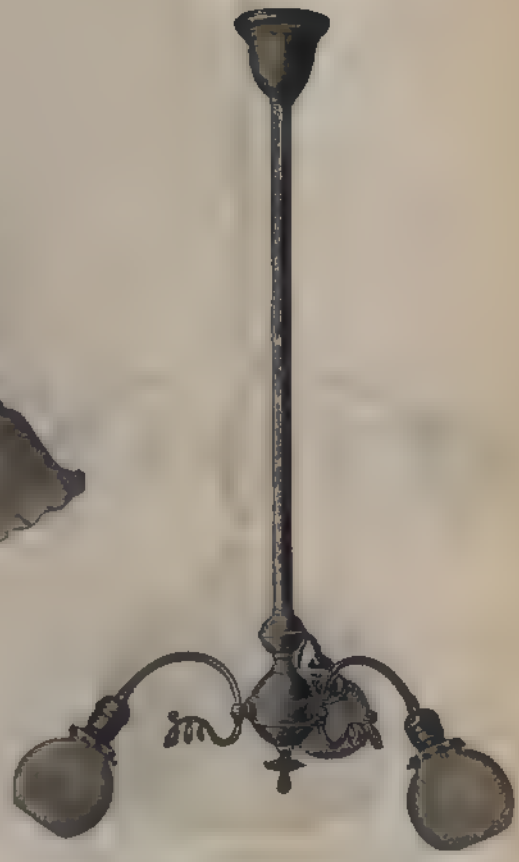


PLATE No. 600E

Length 36 In., Spread 16 In.

Composed of Stem No. 600 and Arms No. 217

TWO LIGHT (TWO ARMS)	Each
No. 600E-2BB—Brushed Brass	$5.35
No. 600E-2OC—Oxidized Copper	5.35

Weight 4 Lbs. Each

THREE LIGHT (THREE ARMS)	
No. 600E-3BB—Brushed Brass	6.40
No. 600E-3OC—Oxidized Copper	6.40

Weight 4½ Lbs. Each

FOUR LIGHT (FOUR ARMS)	
No. 600E-4BB—Brushed Brass	7.45
No. 600E-4OC—Oxidized Copper	7.45

Weight 4⅞ Lbs. Each

Note—Prices do not include Sockets, Glassware or Trimmings

WAKEFIELD INTERCHANGEABLE FIXTURES

SUGGESTIONS FOR STEMS 603, 609 AND 604

ELECTRIC

PLATE No. 609X

PLATE No. 603HK

DINING ROOM CHANDELIER

Length 36 in., Spread 16 in.
Composed of Stem No. 603, Arms No. 211½, 4 in. Globe Holder No. 1209 and Nipple No. 1228.

THREE LIGHT (Two Arms and Bottom)

	Each
No. 603HK-3BB—Brushed Brass	$6.05
No. 603HK-3OC—Oxidized Copper	6.05

Weight 4½ Lbs. Each

FOUR LIGHT (Three Arms and Bottom)

No. 603HK-4BB—Brushed Brass	6.85
No. 603HK-4OC—Oxidized Copper	6.85

Weight 4¾ Lbs. Each

FIVE LIGHT (Four Arms and Bottom)

No. 603HK-5BB—Brushed Brass	7.65
No. 603HK-5OC—Oxidized Copper	7.65

Weight 5¼ Lbs. Each

PLATE No. 609X

Length 36 in., Spread 18 in.

FOUR LIGHT

Two Electric and Two Candle

Composed of Stem No. 609, 4 Arms No. 221 and 2 No. 2008 Candle Holders complete with Candles.

	Each
No. 609X-4BB—Brushed Brass	$11.17
No. 609X-4OC—Oxidized Copper	11.17

Weight 5¾ Lbs. Each

PLATE No. 604F

Length 36 in., Spread 22 in.
Composed of Stem No. 604 and Arms No. 237

TWO LIGHT (TWO ARMS)

	Each
No. 604F-2BB—Brushed Brass	$9 00
No. 604F-2OC—Oxidized Copper	9 00

Weight 5⅞ Lbs. Each

THREE LIGHT (THREE ARMS)

No. 604F-3BB—Brushed Brass	10 25
No. 604F-3OC—Oxidized Copper	10.25

Weight 6⅛ Lbs. Each

FOUR LIGHT (FOUR ARMS)

No. 604F-4BB—Brushed Brass	11.50
No. 604F-4OC—Oxidized Copper	11 50

Weight 7 Lbs. Each

Note—Prices do not include Sockets, Glassware or Trimmings

WAKEFIELD INTERCHANGEABLE FIXTURES

SUGGESTIONS FOR STEMS NOS. 704 AND 708

ELECTRIC

PLATE No. 704E

Length 24 in., Spread 24 in.
Composed of Stem No. 704 and Arms No. 230

	Each
TWO LIGHT (TWO ARMS)	
No. 704E-2BB—Brushed Brass Finish	$9.45
No. 704E-2OC—Oxidized Copper Finish	9.45
Weight 4¾ Lbs. Each	
THREE LIGHT (THREE ARMS)	
No. 704E-3BB—Brushed Brass Finish	10.80
No. 704E-3OC—Oxidized Copper Finish	10.80
Weight 5 Lbs. Each	
FOUR LIGHT (FOUR ARMS)	
No. 704E-4BB—Brushed Brass Finish	12.15
No. 704E-4OC—Oxidized Copper Finish	12 15
Weight 5¼ Lbs. Each	

PLATE No. 708D

Length 24 in., Spread 15 in.
Composed of Stem No. 708 and Arms No. 221

	Each
TWO LIGHT (TWO ARMS)	
No. 708D-2BB—Brushed Brass Finish	$5 25
No. 708D-2OC—Oxidized Copper Finish	6.25
Weight 4¾ Lbs. Each	
THREE LIGHT (THREE ARMS)	
No. 708D-3BB—Brushed Brass Finish	6 25
No. 708D-3OC—Oxidized Copper Finish	6.25
Weight 6 Lbs. Each	
FOUR LIGHT (FOUR ARMS)	
No. 708D-4BB—Brushed Brass Finish	7.25
No. 708D-4OC—Oxidized Copper Finish	7.25
Weight 5½ Lbs. Each	

SUGGESTIONS FOR STEMS NOS. 603S AND 608S

PLATE No. 603B
Composed of Stem No. 603S and Arms No. 211

ELECTRIC CEILING CLUSTERS

These illustrations show one each of the many Ceiling Clusters which can be made up with short Stems 603S and 608S which are the same as 603 and 608 except shorter, being 18 in. long in place of 36 in. We can furnish Short Stems same as any of the regular Stems shown. In ordering add letter S to the regular Stem Numbers.

PLATE No. 608J
Composed of Stem No. 608S and Arms No. 221

Note—Prices do not include Sockets, Glassware or Trimmings

WAKEFIELD INTERCHANGEABLE FIXTURES

SUGGESTIONS FOR STEMS 804, 806 AND 600

Combination and Electric

PLATE No. 804B

COMBINATION FIXTURES

Length 36 in., Spread 22 in.
Composed of Stem No. 804 and Arms Nos. 16 and 217

FOUR LIGHT

2 Electric and 2 Gas Arms

	Each
No. 804B-4BB—Brushed Brass	11.45
No. 804B-4OC—Oxidized Copper	11.45

Weight 6½ Lbs. Each

SIX LIGHT

3 Electric and 3 Gas Arms

No. 804B-6BB—Brushed Brass	13.80
No. 804B-6OC—Oxidized Copper	13.80

Weight 7¼ Lbs. Each

Electric Bottom Light or Pendant may be added to above Stem if desired.

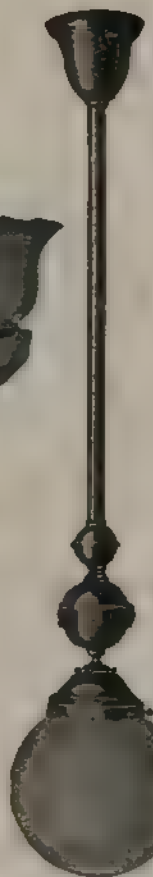


PLATE No. 600-I

ELECTRIC FIXTURE

Length 36 In.
Composed of Stem No. 600 and 1, 4-in. Globe Holder No. 1203

	Each
No. 600-I-BB—Brushed Brass	$3.65
No. 600-I-OC—Oxidized Copper	3.65

Weight 3⅝ Lbs. Each

PLATE No. 806C

COMBINATION FIXTURES

Length 36 In., Spread 18 In.
Composed of Stem No. 806 and Arms Nos. 13 and 211

TWO LIGHT

1 Electric and 1 Gas Arm

	Each
No. 806C-2BB—Brushed Brass	$4 70
No. 806C-2OC—Oxidized Copper	4.70

Weight 3¾ Lbs. Each

FOUR LIGHT

2 Electric and 2 Gas Arms

	Each
No. 806C-4BB—Brushed Brass	$6.65
No. 806C-4OC—Oxidized Copper	6.65

Weight 4½ Lbs. Each

Electric Bottom Light or Pendant may be added to above Stem if desired.

Note—Prices do not include Sockets, Burners, Glassware or Trimmings

WAKEFIELD INTERCHANGEABLE FIXTURES

SUGGESTIONS FOR CEILING FIXTURES NOS. 1230 AND 1229

ELECTRIC

PLATE No. 1230F

Two Light

Composed of 1 No. 1230 Ceiling Fixture, 2 No. 212 Arms, 4 No. 1225 ⅜ In. Terminals, 14 Links No. 1222 Chain and 2 No. 1206 Cast Husks.

	Each
No. 1230F-2BB—Brushed Brass	$5 40
No. 1230F-2OC—Oxidized Copper	5 40

Weight 4⅛ Lbs. Each

Four Light

Composed of 1 No. 1230 Ceiling Fixture, 4 No. 212 Arms, 8 No. 1225 ⅜ In. Terminals, 28 Links No. 1222 Chain and 4 No. 1206 Cast Husks.

	Each
No. 1230F-4BB—Brushed Brass	$9 30
No. 1230F-4OC—Oxidized Copper	9.30

Weight 5 Lbs Each

PLATE No. 1229B

Length 12 In., Spread 21 In.

Composed of Ceiling Fixture No. 1229, Arms No. 222, ⅜ In. Terminals No. 1225, 6 In. Stems No. 1202 and Cast Husks No. 1206.

TWO LIGHT

2 each Arms, Stems and Husks and 4 Terminals

	Each
No. 1229B-2BB—Brushed Brass Finish	$6.70
No. 1229B-2OC—Oxidized Copper Finish	6.70

THREE LIGHT

3 each Arms, Stems and Husks and 6 Terminals

No. 1229B-3BB—Brushed Brass Finish	9.05
No. 1229B-3OC—Oxidized Copper Finish	9.05

FOUR LIGHT

4 each Arms, Stems and Husks and 8 Terminals

No. 1229B-4BB Brushed Brass Finish	11.40
No. 1229B-4OC—Oxidized Copper Finish	11.40

Weights 2 Light 3¼ Lbs 3 Light 4¼ Lbs., 4 Light 5¼ Lbs Each

PLATE No. 1230B

Composed of Ceiling Fixture No. 1230, Medium Necks and Nipples No. 1221 and Stamped Square Husks No. 1232.

TWO LIGHT

Two Necks and Nipples and Two Husks

	Each
No. 1230B-2BB—Brushed Brass	$2.44
No. 1230B-2OC—Oxidized Copper	2.44

Weight 1¾ Lbs. Each

FOUR LIGHT

Four Necks and Nipples and Four Husks

No. 1230B-4BB—Brushed Brass	$3.38
No. 1230B-4OC—Oxidized Copper	3 38

Weight 3 Lbs. Each

PLATE No. 1230C

Composed of Ceiling Fixture No. 1230, Arms No. 211½ and Cast Husks No. 1206.

TWO LIGHT

(Two Arms and Two Husks)

	Each
No. 1230C-2BB—Brushed Brass	$4.10
No. 1230C-2OC—Oxidized Copper	4.10

Weight 2½ Lbs. Each

FOUR LIGHT

(Four Arms and Four Husks)

No. 1230C-4BB—Brushed Brass	$6.70
No. 1230C-4OC—Oxidized Copper	6.70

Weight 3⅝ Lbs. Each

PLATE No. 1230D

Composed of Ceiling Fixture No. 1230 and Arms No. 217.

TWO LIGHT (TWO ARMS)

Nos.	Each
1230D-2BB—Brushed Brass	$3 60
1230D-2OC—Oxidized Copper	3.60

Weight 2 Lbs. Each

FOUR LIGHT (FOUR ARMS)

Nos.	Each
1230D-4BB—Brushed Brass	$5 70
1230D-4OC Oxidized Copper	5 70

Weight 2¾ Lbs. Each

PLATE No. 1229D

Length 20 In., Spread 27 In.

Composed of Ceiling Fixture No. 1229, Arms No. 223, ⅜ In. Chain No. 1222, ⅜ In. Terminals No. 1225 and No. 1206 Husks.

TWO LIGHT

2 each Arms and Husks, 4 Terminals and 14 Links of Chain

	Each
No. 1229D-2BB—Brushed Brass Finish	$6 50
No. 1229D-2OC—Oxidized Copper Finish	6 50

THREE LIGHT

3 each Arms and Husks, 6 Terminals and 21 Links of Chain

No. 1229D-3BB—Brushed Brass Finish	8.75
No. 1229D-3OC—Oxidized Copper Finish	8.75

FOUR LIGHT

4 each Arms and Husks, 8 Terminals and 28 Links of Chain

No. 1229D-4BB—Brushed Brass Finish	11 00
No. 1229D-4OC Oxidized Copper Finish	11 00

Weights 2 Light 3 Lbs., 3 Light 4 Lbs., 4 Light 5 Lbs. Each

Note—Prices do not include Sockets, Glassware or Trimmings

WAKEFIELD INTERCHANGEABLE FIXTURES

SUGGESTIONS FOR NO. 1200 CEILING CANOPY

ELECTRIC

May be used as a 1, 2, 3, 4 or 5 Light

PLATE No. 1200-I

Composed of Canopy No. 1200, Arms No. 211½, ⅜ in. Chain No. 1222 and ⅜ in. Terminals No. 1225.

TWO LIGHT (TWO ARMS)

2 Arms, 4 Terminals and 2 Links Chain	Each
No. 1200-I-2BB—Brushed Brass Finish	$2 15
No. 1200-I-2OC—Oxidized Copper Finish	3 15

THREE LIGHT (TWO ARMS AND CENTER LIGHT)

3 Arms, 6 Terminals and 7 Links Chain	
No. 1200-I-3BB—Brushed Brass Finish	3 70
No. 1200-I-3OC—Oxidized Copper Finish	3 70

FOUR LIGHT (FOUR ARMS)

4 Arms, 8 Terminals and 4 Links, Chain

Each

No. 1200-I-4BB—Brushed Brass.....$5.45
No. 1200-I-4OC—Oxidized Copper..... 5.45

FIVE LIGHT (FOUR ARMS AND CENTER LIGHT)

4 Arms, 10 Terminals and 9 Links Chain

No. 1200-I-5BB—Brushed Brass $7 95
No. 1200-I-5OC—Oxidized Copper..... 7 95

Weights: 2 Light, 3 Lbs., 3 Light 2¼ Lbs. 4 Light 2½ Lbs., 5 Light 2¾ Lbs. Each

PLATE No. 1200A

CEILING OR PORCH LIGHT

Composed of Canopy No. 1200, 1 Small Neck and Nipple No. 1205 and 1 4-in. Globe Holder No. 1203.

Each

No. 1200A-BB—Brushed Brass $1.37
No. 1200A-OC—Oxidized Copper..... 1.37
Weight ¾ Lb. Each

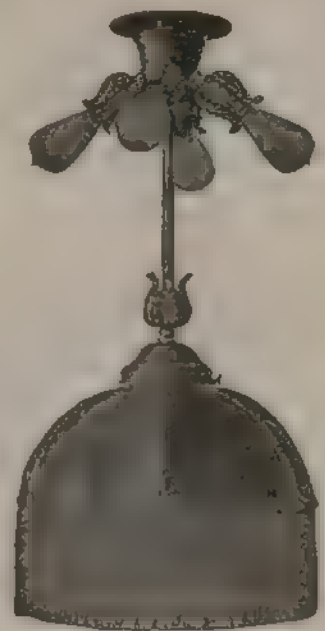


PLATE No. 1200D

DINING ROOM LAMP

Composed of Canopy No. 1200, 4 Small Necks and Nipples No. 1205, 5 Cast Husks No. 1206, 1 12-in. Stem No. 1202 and 1 4-in. Globe Holder No. 1203.

Each

No. 1200D-BB—Brushed Brass.....$4 83
No. 1200D-OC—Oxidized Copper..... 4.83
Weight 2½ Lbs. Each

PLATE No. 1200F

Composed of Canopy No. 1200, Arms No. 204, ⅜ in. Chain No. 1222 and ⅜ in. Terminals No. 1225.

TWO LIGHT (TWO ARMS)

2 Arms, 4 Terminals and 2 Lengths Chain	Each
No. 1200F-2BB—Brushed Brass Finish	$2 25
No. 1200F-2OC—Oxidized Copper Finish	2 25

THREE LIGHT (TWO ARMS AND CENTER LIGHT)

2 Arms, 6 Terminals and 7 Links Chain	
No. 1200F-3BB—Brushed Brass Finish	2 80
No. 1200F-3OC—Oxidized Copper Finish	2 80

FOUR LIGHT (FOUR ARMS)

4 Arms, 8 Terminals and 4 Links Chain

Each

No. 1200F-4BB—Brushed Brass. $3 65
No. 1200F-4OC—Oxidized Copper. . . . 3 65

FIVE LIGHT (FOUR ARMS AND CENTER LIGHT)

4 Arms, 10 Terminals and 9 Links Chain

Each

No. 1200F-5BB—Brushed Brass 4.20
No. 1200F-5OC—Oxidized Copper..... 4.20
Weights: 2 Light 1¼ Lbs., 3 Light 1⅓ Lbs., 4 Light 1¾ Lbs., 5 Light 2 Lbs. Each

PLATE No. 1200T

Composed of Canopy No. 1200, 1 6-in. Stem No. 1202 and 1 Globe Holder No. 1203.

Each

No. 1200T-BB—Brushed Brass.....$1.70
No. 1200T-OC—Oxidized Copper..... 1.70
Weight 1 Lb. Each

Note—Prices do not include Sockets, Glassware or Trimmings except where specified

AMERICAN CUT GLASS

Original Exclusive Designs, Cut on Extra Heavy Blanks; The Deep, Sharp Cutting of American Cut Glass gives it a Sparkling Brilliancy and Rich Appearance

BOWL

	Each
No. 13—Diam. 8 in., Height 3½ in.	$4.50

Weight 2¾ Lbs. Each

BOWL

	Each
No. 14—Diam. 8 in., Height 3¼ in.	$4 50

Weight 2½ Lbs Each

BOWL

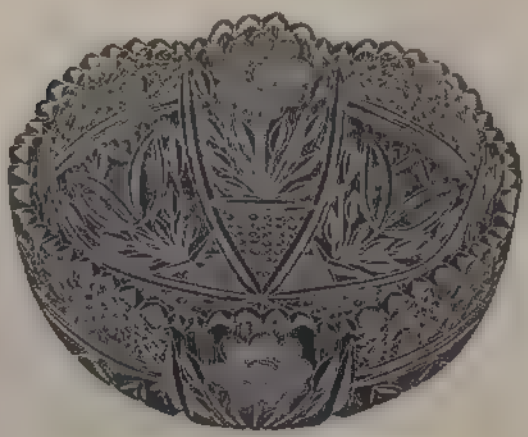
	Each
No. 15—Diam. 8 in., Height 3½ in.	$4 50

Weight 3 Lbs. Each

BOWL

	Each
No. 16—Diam. 8 in., Height 3¼ in.	$5.40

Weight 3 Lbs. Each



BOWL

	Each
No. 17—Diam. 8 in., Height 3½ in.	$6.00

Weight 2¾ Lbs. Each

BOWL

	Each
No. 18—Diam. 8 in., Height 3¾ in.	$6 75

Weight 3¾ Lbs Each

All Above, Open Stock

AMERICAN CUT GLASS

Original Exclusive Designs, Cut on Extra Heavy Blanks; The Deep Sharp Cutting of American Cut Glass gives it a Sparkling Brilliancy and Rich Appearance

BOWL

Each
No. 19—Diam. 8 in., Height 4½ in.....$6.75
Weight 3¾ Lbs. Each
No. 20—Diam. 9 in., Height 4 in..... 9.75
Weight 5 Lbs Each

BOWL

Each
No. 21—Diam. 8 in., Height 3½ in.....$7.50
Weight 3½ Lbs. Each

BOWL

Each
No. 22—Diam. 8 in., Height 3¾ in.....$7.50
Weight 3¾ Lbs. Each

BOWL

Each
No. 23—Diam. 8 in., Height 4¼ in.....$9.00
Weight 3½ Lbs. Each

BOWL

Each
No. 24—Diam. 8 in., Height 3½ in.....$9 00
Weight 3½ Lbs. Each

BOWL

Each
No. 25—Diam. 8 in., Height 4¼ in.....$9.00
Weight 3½ Lbs. Each

All Above, Open Stock

AMERICAN CUT GLASS

Original Exclusive Designs, Cut on Extra Heavy Blanks; The Deep, Sharp Cutting of American Cut Glass gives it a Sparkling Brilliancy and Rich Appearance

NAPPY

Nos.	Style	Diam., In.	Weight, Lbs	Each
118	Round	5	¾	$1 63
119	Handled	5	1	1 76
120	Round	6	1¼	1.75
121	Handled	6	1½	1.88

NAPPY

Nos.	Style	Diam., In.	Weight, Lbs.	Each
122	Round	6	1	$2 25
123	Handled	6	1¼	2.40

NAPPY

Nos.	Style	Diam., In.	Weight, Lbs.	Each
124	Round	6	1¼	$2 38
125	Handled	6	1½	2.50

NAPPY

No.	Style	Diam., In.	Weight, Lbs.	Each
126	Round	6	1¼	$2 38

NAPPY

No.	Style	Diam., In.	Weight, Lbs.	Each
128	Round	6	1¼	$2 63

NAPPY

Nos.	Style	Diam., In.	Weight, Lbs.	Each
129	Round	5	¾	$2.00
130	Round	6	1	2.76
131	Round	8	2¼	5.25

NAPPY

No.	Style	Diam., In.	Weight, Lbs	Each
132	Round	6	1	$3.00

NAPPY

No.	Style	Diam., In	Weight, Lbs	Each
133	Round	6	1¼	$3 75

NAPPY

No.	Style	Diam., In	Weight, Lbs	Each
134	Round	6	1¼	$3.75

All Above, Open Stock

AMERICAN CUT GLASS

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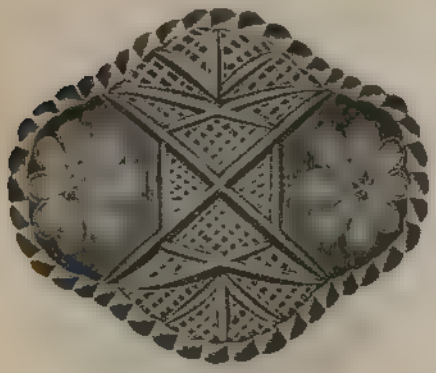
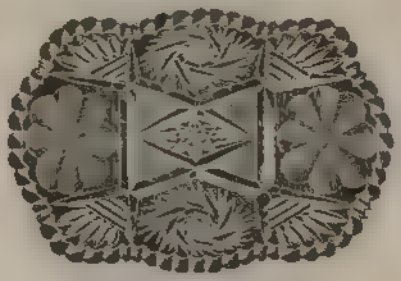


BON BON

Each

No. 135 Length 6½ in., Width 6½ in. Depth 1¼ in.....$1.95

Weight 1¼ Lbs. Each



BON BON

Each

No. 136—Length 6¾ in., Width 4¾ in., Depth 1½ in.....$2.00

Weight 1 Lb. Each

OLIVE OR LEMON

Each

No. 137 Length 6½ in. Over Handles, Width 5¼ in., Depth 1⅝ in.....$2.25

Weight 1 Lb. Each

SPOON TRAY

Each

No. 151 Length 7¾ in., Width 3¾ in., Depth 1½ in.....$2.00

Weight ¾ Lb. Each

SPOON TRAY

Each

No. 154 Length 8¼ in., Width 4¼ in., Depth 1¾ in.....$3.00

Weight 1¼ Lbs. Each

SPOON TRAY

Each

No. 155 Length 7¾ in., Width 3⅝ in., Depth 1½ in.....$2.63

Weight ¾ Lb. Each

SPOON TRAY

Each

No. 156—Length 7 in., Width 4¾ in., Depth ⅞ in.....$1.88

Weight ¾ Lb. Each

SPOON TRAY

Each

No. 157—Length 7½ in., Width 4 in., Depth 1⅝ in.....$2.00

Weight 1 Lb. Each

SPOON TRAY

Each

No. 158—Length 8 in., Width 3 in., Depth 2 in.....$2.70

Weight 1 Lb. Each

SPOON TRAY

Each

No. 159—Length 7¾ in., Width 5 in., Depth 1½ in.....$3.75

Weight 1 Lb. Each

SPOON TRAY

Each

No. 160—Length 8 in., Width 4¼ in., Depth 1⅝ in.....$4.05

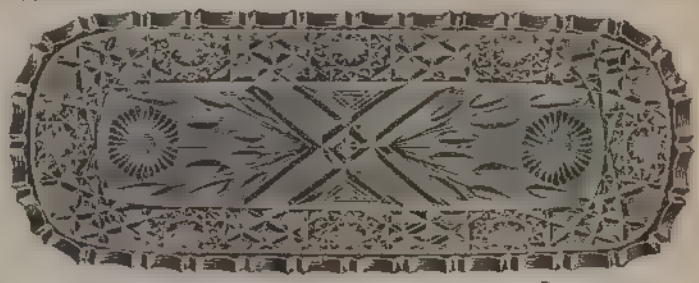
Weight 1½ Lbs. Each

All Above, Open Stock

AMERICAN CUT GLASS

Original Exclusive Designs, Cut on Extra Heavy Blanks; The Deep, Sharp Cutting of American Cut Glass gives it a Sparkling Brilliancy and Rich Appearance

CELERY TRAY — Each
No. 205 Length 10¾ in. Width 4¾ in., Depth 1¼ in. . . . $4.50
Weight 1½ Lbs. Each



CELERY TRAY — Each
No. 206 Length 12¼ in., Width 4¾ in., Depth 1¾ in. $6 00
Weight 2½ Lbs. Each

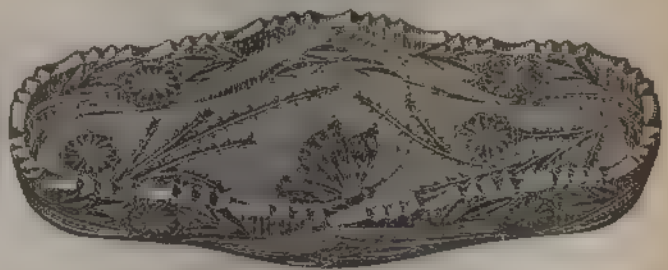
CELERY TRAY — Each
No. 207 Length 10½ in., Width 4¾ in., Depth 1¼ in.. $3 75
Weight 1½ Lbs. Each

CELERY TRAY — Each
No. 208 Length 10¾ in., Width 4¾ in., Depth 1¾ in. $3.75
Weight 1¾ Lbs. Each

CELERY TRAY — Each
No. 209—Length 10¾ in. Width 4½ in., Depth 1½ in. . $3 75
Weight 2 Lbs. Each

CELERY TRAY — Each
No. 210 Length 10¾ in. Width 4¾ in., Depth 1¾ in. . . . $5.25
Weight 2 Lbs. Each

CELERY TRAY — Each
No. 211—Length 12 in., Width 4½ in., Depth 1¾ in. $5 25
Weight 2 Lbs. Each



CELERY TRAY — Each
No. 213—Length 11 in., Width 5 in., Depth 2 in. $7 50
Weight 2½ Lbs. Each

CELERY TRAY — Each
No. 212—Length 11½ in. Width 4 in., Depth 2¼ in. $7 50
Weight 2½ Lbs. Each
All Above, Open Stock

AMERICAN CUT GLASS

Original Exclusive Designs, Cut on Extra Heavy Blanks; The Deep, Sharp Cutting of American Cut Glass gives it a Sparkling Brilliancy and Rich Appearance

SUGAR AND CREAMER — Per Set

No. 252—Diam. of Sugar 4 in., Height 2½ in.; Diam. of Creamer 3½ in., Height 3 in..... $3 75
Weight 2¼ Lbs. per Set

SUGAR AND CREAMER — Per Set

No. 253—Diam. of Sugar 4 in., Height 2½ in., Diam. of Creamer 3¾ in., Height 2¾ in.....$4.50
Weight 2¼ Lbs per Set

SUGAR AND CREAMER — Per Set

No. 257—Diam. of Sugar 4 in., Height 2¼ in.; Diam. of Creamer 3¾ in., Height 2¼ in.....$4.50
Weight 2 Lbs. per Set

SUGAR AND CREAMER — Per Set

No. 258—Diam. of Sugar 3½ in., Height 3 in.; Diam. of Creamer 3¼ in., Height 3½ in.....$3.00
Weight 2 Lbs. per Set

SUGAR AND CREAMER — Per Set

No. 259—Diam. of Sugar 4 in., Height 2½ in.; Diam. of Creamer 3½ in., Height 3 in.....$3.75
Weight 1¾ Lbs per Set

SUGAR AND CREAMER — Per Set

No. 260—Diam. of Sugar 4¼ in., Height 2¾ in.; Diam. of Creamer 3½ in., Height 3 in.. . . . . $5.25
Weight 2½ Lbs. per Set

All Above, Open Stock

AMERICAN CUT GLASS

Original Exclusive Designs, Cut on Extra Heavy Blanks; The Deep, Sharp Cutting of American Cut Glass gives it a Sparkling Brilliancy and Rich Appearance

SUGAR AND CREAMER

No. 261—Diam. of Sugar 4 in., Height 3 in.; Diam. of Creamer 4 in., Height 3¼ in.. . . . . Per Set .$6 00
Weight 2¼ Lbs. per Set

SUGAR AND CREAMER

No. 262—Diam. of Sugar 3 in., Height 3¾ in.; Diam. of Creamer 3 in., Height 4¼ in . . . . . Per Set $7 00
Weight 1¾ Lbs. per Set

SUGAR AND CREAMER

No. 264—Diam. of Sugar 4½ in., Height 3¼ in.; Diam. of Creamer 4 in., Height 3¾ in . . . . . Per Set . $7 50
Weight 3 Lbs. per Set

SUGAR AND CREAMER

No. 265—Diam. of Sugar 4 in., Height 4 in.; Diam. of Creamer 3¾ in., Height 3¾ in.. . . . . Per Set $7 50
Weight 2½ Lbs. per Set

SUGAR AND CREAMER

No. 266—Diam. of Sugar 4 in., Height 3 in.; Diam. of Creamer 3½ in., Height 3¼ in.....Per Set .$8 25
Weight 2¼ Lbs. per Set

All Above, Open Stock

AMERICAN CUT GLASS

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SUGAR AND CREAMER

Per Set

No. 267—Size of Sugar 5x3½ in., Height 4 in.; Size of Creamer 6½x3¼ in., Height 4 in.....$16.00

Weight 3 Lbs. per Set

MAYONNAISE BOWL AND PLATE

Per Set

No. 228—Diam. of Bowl 5 in., Height 3¼ in.; Diam. of Plate 6 in.....$4.50

Weight 2 Lbs. per Set

MAYONNAISE BOWL AND PLATE

Per Set

No. 229—Diam. of Bowl 5 in., Height 3¼ in.; Diam. of Plate 6 in.....$6.25

Weight 2 Lbs. per Set

MAYONNAISE BOWL AND PLATE

Per Set

No. 230—Diam. of Bowl 5 in., Height 3 in.; Diam. of Plate 6 in.....$6.75

Weight 2 Lbs. per Set

OIL OR VINEGAR

Each

No. 306—Height 7 in., Diam. 3½ in.....$4.00

Weight 1½ Lbs. Each

OIL OR VINEGAR

Each

No. 307—Height 7½ in., Diam. 3½ in.....$4.00

Weight 1½ Lbs. Each

OIL OR VINEGAR

Each

No. 308—Height 7¾ in., Diam. 3½ in.....$4.25

Weight 1½ Lbs. Each

OIL OR VINEGAR

Each

No. 311—Height 8½ in., Diam. 3½ in.....$6.00

Weight 1¾ Lbs. Each

OIL OR VINEGAR

Each

No. 312—Height 9¾ in., Diam. 3¼ in.....$6.00

Weight 1¾ Lbs. Each

All Above, Open Stock

AMERICAN CUT GLASS

Original Exclusive Designs, Cut on Extra Heavy Blanks; The Deep Sharp Cutting of American Cut Glass gives it a Sparkling Brilliancy and Rich Appearance

WATER JUG AND GLASSES

	Each
No 368—Four Point Jug, Height 11 in., Diam 4½ in	$8 25
Weight 4 Lbs. Each	
	Per Dozen
No. 369—Tumblers to Match; Height 4 in., Diam 3 in	$10 50
Weight 8 Lbs. per Dozen	

WATER JUG AND GLASSES

	Each
No. 370—Four Pint Jug, Height 10 in Diam 5¾ in	$7 50
Weight 5½ Lbs. Each	
	Per Dozen
No. 371—Tumblers to Match; Height 4 in, Diam. 3 in	$10 50
Weight 8 Lbs. per Dozen	

WATER JUG AND GLASSES

	Each
No. 372—Four Pint Jug, Height 10⅛ in., Diam 5¾ in	$8 25
Weight 5 Lbs. Each	
	Per Dozen
No. 373—Tumblers to Match; Height 4 in., Diam 3 in	$13 50
Weight 6 Lbs. per Dozen	

WATER JUG AND GLASSES

	Each
No. 374—Four Pint Jug, Height 10 in., Diam 6 in	$9 75
Weight 5⅛ Lbs. Each	
	Per Dozen
No. 375—Tumblers to Match, Height 4 in., Diam. 3 in	$13 00
Weight 7 Lbs. per Dozen	

All Above, Open Stock

AMERICAN CUT GLASS

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WATER JUG AND GLASSES

	Each
No. 376—Four Pint Jug, Height 10 in., Diam. 6¼ in. Weight 5½ Lbs. Each	$13 50
	Per Dozen
No. 377—Tumblers to Match, Height 4 in., Diam. 3 in. Weight 7 Lbs. per Dozen	$18 00

WATER JUG AND GLASSES

	Each
No. 378—Four Pint Jug, Height 10 in., Diam. 6¼ in. Weight 5½ Lbs. Each	$15 00
	Per Dozen
No. 379—Tumblers to Match, Height 4 in., Diam. 3 in. Weight 6 Lbs. per Dozen	$27 00

BUD VASES

Dozen	Dozen	Dozen	Dozen	Dozen
No. 412—Height 10 in., Diam. 2⅛ in.... $18.00 Weight 7 Oz. Each	No. 413—Height 10 in. Diam. 2¾ in.....$18.00 Weight 4 Oz. Each	No. 414—Height 10 in., Diam 2½ in.....$18.00 Weight 5 Oz. Each	No. 415—Height 10 in., Diam 2½ in.....$18.00 Weight 6 Oz. Each	No. 416—Height 10 in., Diam 2 in.....$18.00 Weight 5 Oz. Each

All Above, Open Stock

AMERICAN CUT GLASS

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VASE

Each

No. 417—Height 12 in., Diam. 5 in. $6 75
Weight 4¾ Lbs. Each

VASE

Each

No. 418—Height 12 in., Diam. 5¼ in. .$8.50
Weight 5 Lbs. Each

VASE

Each

No. 419—Height 12 in., Diam. 4 in. ..$8 25
Weight 5⅛ Lbs. Each

VASE

Each

No. 420—Height 14 in., Diam. 3⅝ in. $9.00
Weight 4 Lbs. Each

VASE

Each

No. 421—Height 10 in., Diam. 5¼ in.; Weight 4¾ Lbs. $7 50
No. 422—Height 12 in., Diam. 5⅛ in., Weight 5½ Lbs. 10 05

VASE

Each

No. 423—Height 12 in., Diam. 5 in. . . . $13 50
Weight 5¼ Lbs. Each

VASE

Each

No. 424—Height 12 in., Diam. 5 in. . . . $19 50
Weight 5 Lbs. Each

All Above, Open Stock

AMERICAN CUT GLASS VASES

Original Exclusive Designs, Cut on Extra Heavy Blanks; The Deep, Sharp Cutting of American Cut Glass gives it a Sparkling Brilliancy and Rich Appearance

VASE

No. 425—Height 12 in., Diam. 4 in. .. Each $13.50
Weight 3½ Lbs. Each

VASE

No. 426—Height 12 in., Diam. 7 in. .. Each $19.50
Weight 7 Lbs. Each

VASE

No. 427 Height 12 in., Diam. 6½ in. Each $24.00
Weight 7 Lbs. Each

BASKET

No. 428—Height Over Handle 12½ in. Diam. 10 in. .. Each $15.00
Weight 4 Lbs. Each

BASKET

No. 429 Height Over Handle 11½ in., Diam. 8 in. Each $18.00
Weight 3 Lbs. Each

All Above, Open Stock

AMERICAN CUT GLASS

Original Exclusive Designs, Cut on Extra Heavy Blanks; The Deep, Sharp Cutting of American Cut Glass gives it a Sparkling Brilliancy and Rich Appearance

COMPORT

Each

No. 454—Height 6 in., Diam. 5¾ in...$4.50

Weight 1¾ Lbs. Each

COMPORT

Each

No. 455—Height 4 in., Diam. 4 in.
Weight 1 Lb. Each . . $2.70

No. 456—Height 4½ in., Diam. 5 in.
Weight 1¾ Lbs. Each . . 3.00

COMPORT

Each

No. 457—Height 5 in., Diam. 6½ in...$3 38

Weight 1 Lb. Each

COMPORT

Each

No. 458—Height 8 in., Diam. 6 in. $4.05
Weight 1¾ Lbs. Each

COMPORT

Each

No. 459—Height 7½ in., Diam. 6 in...$6 00
Weight 2 Lbs. Each

COMPORT

Each

No. 460—Height 7½ in. Diam. 6¼ in $7 50
Weight 1¾ Lbs. Each

WHISKEY SETS

Set Complete

Per Set

No. 1202—Set Consists of One Quart Decanter, 12 in. Plateau and Half Dozen One-Half Pint Tumblers to Match.....$27.00

Weight 13¾ Lbs. per Set

Separate Pieces

Each

No. 504—Decanter; One Quart; Weight 1¾ Lbs. Each.....$10.50
No. 50 —Plateau; Diam. 12 in.; Weight 6½ Lbs. Each..... 4.00

Per Dozen

No. 505—Tumblers; Half Pint; Weight 5½ Lbs per Dozen....$15.00

All Above, Open Stock

AMERICAN CUT GLASS

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FOOTED FLOWER BOWL

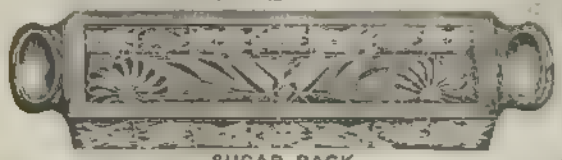
Each

No. 430—Diam. 6 in., Height 3½ in.....$5 25
Weight 1½ Lbs. Each

FOOTED FLOWER BOWL

Each

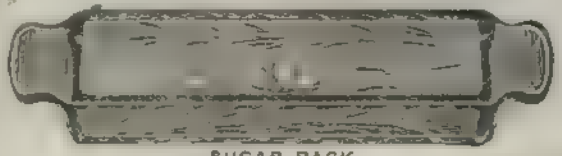
No. 431—Diam. 6 in., Height 4 in.....$5.25
Weight 2 Lbs. Each



SUGAR RACK

Each

No. 506—Length 8⅝ in., Width 2 in. Height 1¼ in. .. $1 00
Weight ¾ Lb. Each



SUGAR RACK

Each

No. 507 Length 8⅝ in. Width 2 in., Height 1¼ in $2 00
Weight 1 Lb. Each

NUT BOWL

Each

No. 508—Length 7⅝ in., Width 6¾ in., Height 2¼ in.....$4.50
Weight 1¾ Lbs. Each

FOOTED NAPPY

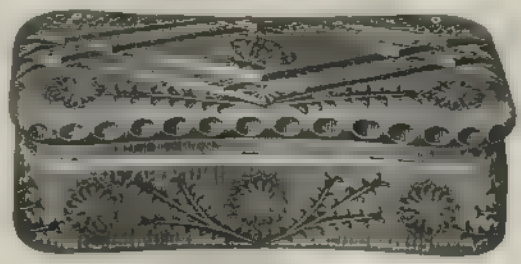
Each

No. 509—Diameter 7 in., Height 3¼ in.....$5.25
Weight 1¾ Lbs. Each

BASKET

Each

No. 515—Diam. 6 in., Height Over Handle 4½ in... $4 50
Weight 1¾ Lbs. Each



GLOVE BOX

Each

No. 516—Length 8½ in., Width 4½ in., Height 3 in.; Glass Cover $15.00
Weight 3¾ Lbs

JEWEL BOX

Each

No. 517—Diam. 6 in. Height 3¼ in. $3.25
Weight 1½ Lbs. Each

HAIR RECEIVER

Each

No. 518—Diam 3¼ in., Height 3 in. $3.00
Weight ¾ Lb. Each

PUFF BOX

Each

No. 519 Diam 3¼ in., Height 3 in ... $3 00
Weight 1 Lb. Each

TOOTH PICK HOLDERS

Each

No. 502—Diam. 2 in., Height 2½ in. $1 95
Weight ¼ Lb. Each

All Above, Open Stock

HARTFORD PUNCH KNIVES

Cuts are two third Size

Per Dozen

No. 5050S—Stag Handle; One Blade and Leather Punch; Brass Lining and Rivets Steel Bolsters, German Silver Shield $10 50

Per Dozen

No 5052E—Ebony Handle; One Blade and Leather Punch, Brass Lining and Rivets Steel Bolsters, German Silver Shield $14.00

Per Dozen

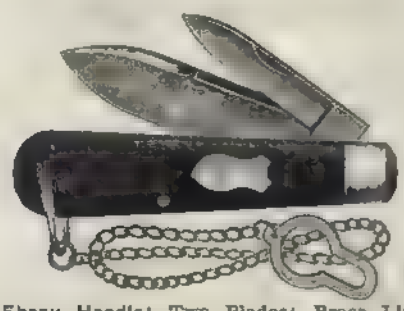
No. 5327RW—Celluloid Handle; Red and White Stripes and Silver Star on Blue Ground; Two Blades and Leather Punch Brass Lining and Rivets, German Silver Bolsters...$18.00

Per Dozen

No. 5051S—Stag Handle; Two Blades and Leather Punch, Brass Lining and Rivets, German Silver Bolsters and Shield $20.00

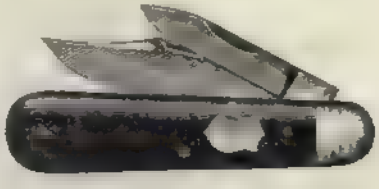
Per Dozen

No. 5063PI—Pearl Shell Handle; Two Blades and Leather Punch, Brass Lining and Rivets; German Silver Bolsters and Shield.....$22.00



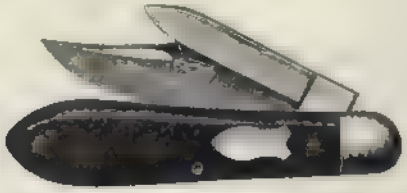
Per Dozen

No. 5102E—Ebony Handle; Two Blades; Brass Lining and Rivets, German Silver Bolsters and Shield, Length of Chain 16 in.....$8.00



Per Dozen

No 5207E—Ebony Handle; Two Blades; Brass Lining and Rivets; German Silver Bolsters and Shield..... $10.00



Per Dozen

No 5201E—Ebony Handle; Two Blades, Brass Lining and Rivets; Steel Bolsters; German Silver Shield.....$9.00

Per Dozen

No. 5200E—Ebony Handle; Two Blades; Brass Lining and Rivets; Steel Bolsters; German Silver Shield.....$9.00

Per Dozen

No. 5202R—Rosewood Handle; Two Blades; Brass Lining and Rivets, Steel Bolsters, German Silver Shield; Easy Opener $8.00

Per Dozen

No 5308R—Rosewood Handle; Two Blades, Brass Lining and Rivets; Steel Bolsters; German Silver Shield.....$10.50

All Above, Half Dozen in a Box; Average Weight 1¾ Lbs. per Dozen

HARTFORD POCKET KNIVES

Cuts are two third Size

Per Dozen
No. 5309E—Ebony Handle; Two Blades, Brass Lining and Rivets, Steel Bolsters; German Silver Shield . $10 50

Per Dozen
No 5310S—Stag Handle; Two Blades, Brass Lining and Rivets Steel Bolsters; German Silver Shield . . $10 50

Per Dozen
No. 5302R—Rosewood Handle; Two Blades Brass Lining and Rivets Steel Bolsters, German Silver Shield $11 50

Per Dozen
No. 5303S—Stag Handle; Two Blades; Brass Lining and Rivets, Steel Bolsters, German Silver Shield . $11 50

Per Dozen
No. 5410SP—Smoked Pearl Handle; Two Blades; Brass Lining and Rivets, German Silver Bolsters and Shield.. $12 00

Per Dozen
No. 5319C—Cocobola Handle; Two Blades; Brass Lining and Rivets; Steel Bolsters; German Silver Shield $10 50

Per Dozen
No 5322S—Stag Handle; Two Blades, Brass Lining and Rivets Steel Bolsters, German Silver Shield . . $11 50

Per Dozen
No. 5316R—Rosewood Handle; Two Blades, Brass Lining and Rivets, Steel Bolsters German Silver Shield $10.50

Per Dozen
No. 5312S—Stag Handle; Two Blades, Brass Lining and Rivets; Steel Bolsters, German Silver Shield; Easy Opener $12.00

Per Dozen
No. 5312R—Rosewood Handle; Two Blades, Brass Lining and Rivets Steel Bolsters, German Silver Shield, Easy Opener $11 50

Per Dozen
No. 5325E—Ebony Handle; Two Blades; Brass Lining and Rivets, Steel Bolsters, German Silver Shield . . . $11 50

Per Dozen
No. 5325S—Stag Handle; Two Blades, Brass Lining and Rivets, Steel Bolsters, German Silver Shield $12 00

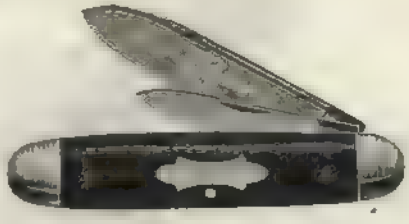
All Above, Half Dozen in a Box; Average Weight 1¾ Lbs. per Dozen

HARTFORD POCKET KNIVES

Cuts are two third Size

Per Dozen

No. 5406RB—Red and Black Celluloid Handle; Two Blades; Brass Lining and Rivets; German Silver Bolsters and Shield $12.00



Per Dozen

No. 5406—Blue Celluloid Handle; Two Blades; Brass Lining and Rivets; German Silver Bolsters and Shield. $12 00

Per Dozen

No. 5428C—Cocobola Handle; Two Blades; Brass Lining and Rivets German Silver Bolsters and Shield; Easy Opener $13.00

Per Dozen

No. 5412C—Cocobola Handle; Two Blades, Brass Lining and Rivets; German Silver Bolsters and Shield $12.00

Per Dozen

No. 5453S—Stag Handle; Two Blades; Brass Lining and Rivets; Steel Bolsters; German Silver Shield.....$12 00

Per Dozen

No. 5423C—Cocobola Handle; Two Blades; Brass Lining and Rivets; German Silver Bolsters and Shield $12.00

Per Dozen

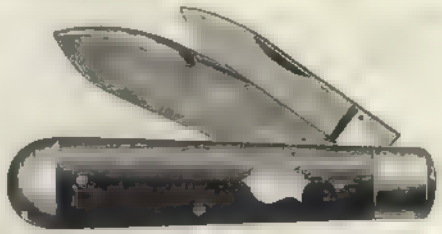
No. 5430—Oak Handle; Two Blades; Brass Lining and Rivets; German Silver Bolsters and Shield .. . $12 00

Per Dozen

No. 5431PI—Pearl Ivory Handle; Two Blades; Brass Lining and Rivets, German Silver Bolsters and Shield .. $12 00

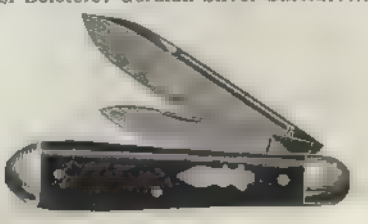
Per Dozen

No. 5434S—Stag Handle; Two Blades, Brass Lining and Rivets; Steel Bolsters; German Silver Shield.....$12.00



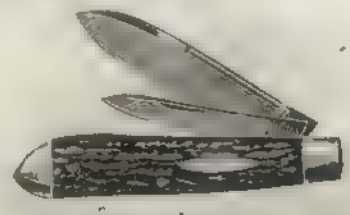
Per Dozen

No. 5434E—Ebony Handle; Two Blades, Brass Lining and Rivets; Steel Bolsters; German Silver Shield.....$12.00



Per Dozen

No 5424C—Cocobola Handle; Two Blades, Brass Lining and Rivets; German Silver Bolsters and Shield... . . $12 00



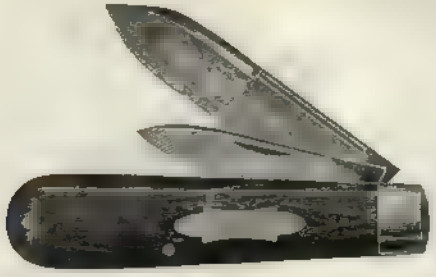
Per Dozen

No. 5416—Blue Celluloid Handle; Two Blades Brass Lining and Rivets German Silver Bolsters and Shield . $13.00

All Above, Half Dozen in a Box; Average Weight 1¾ Lbs. per Dozen

HARTFORD POCKET KNIVES

Cuts are two third Size



Per Dozen

No. 5436R—Rosewood Handle; Two Blades; Brass Lining and Rivets, Steel Bolsters, German Silver Shield . . $13 00

Per Dozen

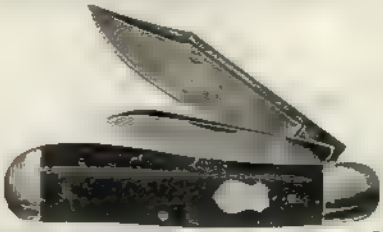
No 5438C—Cocobola Handle; Two Blades, Steel Lining and Rivets; Stee Bolsters German Silver Shield . . $12.00

Per Dozen

No. 5446C—Cocobola Handle; Two Blades; Brass Lining and Rivets; German Silver Bolsters and Shield.....$12.00

Per Dozen

No. 5447E—Ebony Handle, Two Blades, Brass Lining and Rivets; German Silver Bolsters and Shield.....$12.00

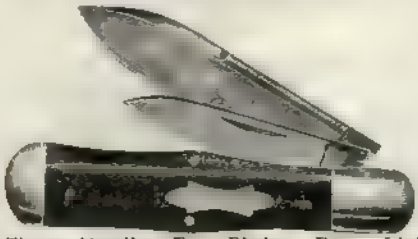


Per Dozen

No. 5421E—Ebony Handle, Two Blades Brass Lining and Rivets; German Silver Bolsters and Shield.....$12.00

Per Dozen

No 5419E—Ebony Handle; Two Blades; Brass Lining and Rivets; German Silver Bolsters and Shield.. . $13.00



Per Dozen

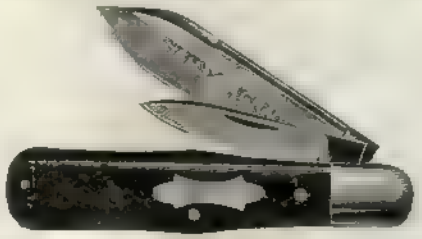
No. 5444E—Ebony Handle; Two Blades; Brass Lining and Rivets; German Silver Bolsters and Shield.....$12 00

Per Dozen

No 5440BC—Black Celluloid; Two Blades; Brass Lining and Rivets; German Silver Bolsters and Shield.....$12 00

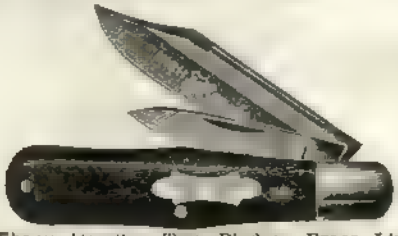
Per Dozen

No. 5636S—Stag Handle; Two Blades; Brass Lining and Rivets; German Silver Bolsters and Shield.....$14.00



Per Dozen

No. 5642E—Ebony Handle; Two Blades; Brass Lining and Rivets; German Silver Bolsters and Shield.....$12.00



Per Dozen

No. 5643E—Ebony Handle, Two Blades, Brass Lining and Rivets; German Silver Bolsters and Shield.....$12.00

Per Dozen

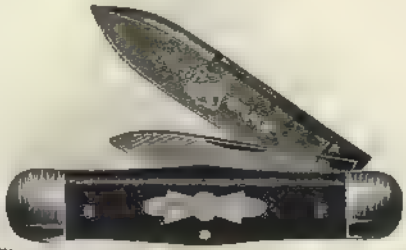
No. 5326RW—Celluloid Handle; Red and White Stripes, with Silver Star on Blue Ground, Two Blades; Brass Lining and Rivets; German Silver Bolsters.....$12.00

All Above, Half Dozen in a Box; Average Weight 1¾ Lbs. per Dozen

HARTFORD POCKET KNIVES

Cuts are two third Size

Per Dozen
No. 5622BC—Black Celluloid Handle; Two Blades; Brass Lining and Rivets, German Silver Bolsters and Shield .. . $14.00

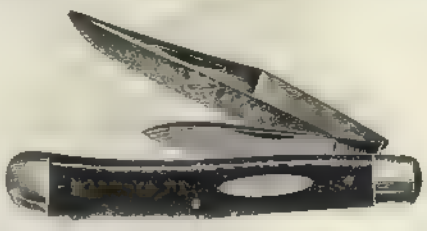


Per Dozen
No. 5716E—Ebony Handle; Two Blades, Brass Lining and Rivets; German Silver Bolsters and Shield... . .... $14.00

Per Dozen
No. 5632E—Ebony Handle; Two Blades; Brass Lining and Rivets, German Silver Bolsters and Shield $14.00

Per Dozen
No. 5712E—Ebony Handle; Two Blades, Brass Lining and Rivets, German Silver Bolsters and Shield $13 00

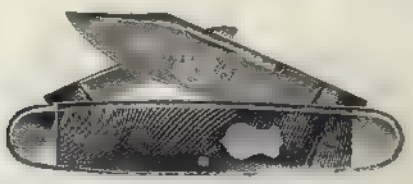
Per Dozen
No. 5710E—Ebony Handle; Two Blades; Brass Lining and Rivets, German Silver Bolsters and Shield.. ... $13 00



Per Dozen
No. 5615BC—Black Celluloid Handle; Two Blades Brass Lining and Rivets; German Silver Bolsters and Shield.... .$14 00

Per Dozen
No. 5626E—Ebony Handle; Two Blades, Brass Lining and Rivets; German Silver Bolsters and Shield $15 00

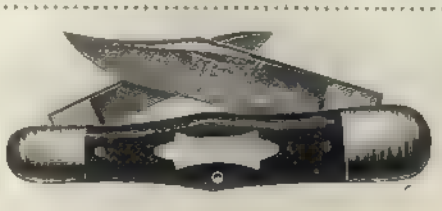
Per Dozen
No. 5409GP—Gold Celluloid Handle; Two Blades, Brass Lining and Rivets, German Silver Bolsters and Shield $13 00



Per Dozen
No. 5631GP—Gold Pearl Handle; Two Blades; Brass Lining and Rivets; German Silver Bolsters and Shield.....$13.00

Per Dozen
No. 5630RB—Red and Black Celluloid Handle; Two Blades; Brass Lining and Rivets, German Silver Bolsters and Shield $13.00

Per Dozen
No. 5414S—Stag Handle; Two Blades; Brass Lining and Rivets; German Silver Bolsters and Shield.....$12.00



Per Dozen
No. 5619E—Ebony Handle; Two Blades, Brass Lining and Rivets; German Silver Bolsters and Shield.....$14.00

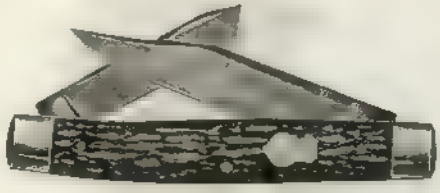
All Above, Half Dozen in a Box; Average Weight 1¾ Lbs. per Dozen

HARTFORD POCKET KNIVES

Cuts are two third Size

Per Dozen

No. 7423 I—Iris Handle; Two Blades Brass Lining and Rivets, German Silver Bolsters and Shield..... $12 00



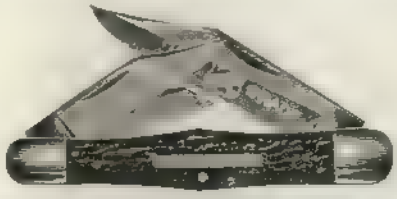
Per Dozen

No. 5705S—Stag Handle: Two Blades, Brass Lining and Rivets; German Silver Bolsters and Shield.....$15.00

Per Dozen

No. 7439S—Stag Handle; Three Blades; Brass Lining and Rivets German Silver Bolsters and Shield $10 00

No. 7439BH—Horn Handle; Otherwise same as above. . 10 00

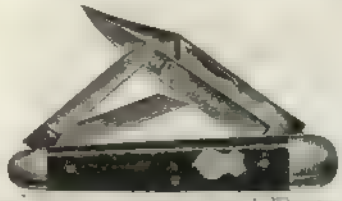


Per Dozen

No. 5805S—Stag Handle; Three Blades; Brass Lining and Rivets, German Silver Bolsters and Shield $18.00

Per Dozen

No. 5803GB—Gray Buff Handle; Three Blades; Brass Lining and Rivets, Steel Bolsters, German Silver Shield $18 00

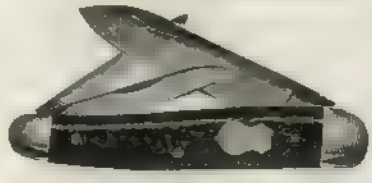


Per Dozen

No. 5807BC—Black Celluloid Handle; Three Blades Brass Lining and Rivets, German Silver Bolsters and Shield.. $18 00

Per Dozen

No. 5721BC—Black Celluloid Handle; Three Blades; Brass Lining and Rivets; German Silver Bolsters and Shield..$18 00

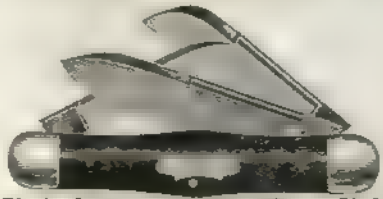


Per Dozen

No. 7612BC—Black Celluloid Handle; Three Blades; Brass Lining and Rivets, German Silver Bolsters and Shield $16 50

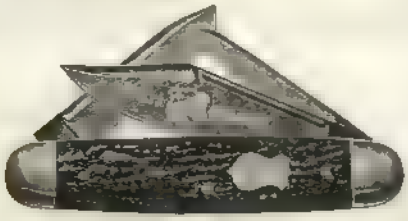
Per Dozen

No. 5724S—Stag Handle; Three Blades Brass Lining and Rivets; German Silver Bolsters and Shield $16 00



Per Dozen

No. 5730BC—Black Celluloid Handle, Three Blades, Brass Lining and Rivets, German Silver Bolsters and Shield $18 00



No. 5809S—Stag Handle; Three Blades Brass Lining and Rivets; German Silver Bolsters and Shield.. . ....$18.00

No. 5813BC—Black Celluloid Handle, Three Blades Brass Lining and Rivets; German Silver Bolsters and Shield.....$18.00

All Above, Half Dozen in a Box; Average Weight 1¾ Lbs. per Dozen

HARTFORD POCKET KNIVES

Cuts are two third Size

Per Dozen

No 5727BC—Black Celluloid Handle; Three Blades, Brass Lining and Rivets; German Silver Bolsters and Shield.. $16 00

Per Dozen

No. 5729C—Cocobola Handle; Three Blades, Brass Lining and Rivets, German Silver Bolsters and Shield $17 00

Per Dozen

No. 5723S—Stag Handle; Three Blades, Brass Lining and Rivets; German Silver Bolsters and Shield . . $17 00

Per Dozen

No. 5821BC—Black Celluloid Handle; Three Blades, Brass Lining and Rivets, German Silver Bolsters and Shield ... $18 00

Per Dozen

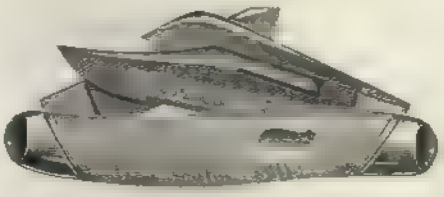
No. 5825S—Stag Handle; Three Blades; Brass Lining and Rivets; German Silver Bolsters and Shield.....$18.00

Per Dozen

No. 5823—Gray Buff Handle; Three Blades, Brass Lining and Rivets; German Silver Bolsters and Shield.....$20.00

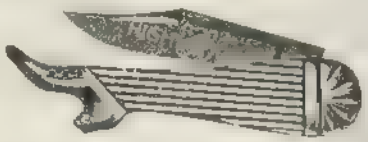
Per Dozen

No. 5827—Blue Celluloid Handle; Three Blades, Brass Lining and Rivets; German Silver Shield.....$20.00



Per Dozen

No. 5829P l—Pearl Ivory Handle; Three Blades, Brass Lining and Rivets; German Silver Bolsters and Shield.....$21.00



Per Dozen

No. 7431BW—Black and White Celluloid Handle; Brass Lining and Rivets; German Silver Slipper and Cap.....$10.50

Per Dozen

No. 5329Pl—Pearl Ivory Handle; Brass Lining and Rivets; Two Blades; Specially designed for office use.....$10.50

Per Dozen

No. 7416C—Cocobola Handle; Two Blades; Brass Lining and Rivets; German Silver Bolsters and Shield.....$11.50

Per Dozen

No. 7418S—Stag Handle; Two Blades Brass Lining and Rivets; German Silver Tips and Shield.....$12.00

Per Dozen

No. 7404GP—Gold Celluloid Handle; Two Blades; Brass Lining and Rivets, German Silver Bolsters and Shield .. .$10 50

Per Dozen

No. 7610Pl—Pearl Ivory Handle, Three Blades; Brass Lining and Rivets, German Silver Tips and Shield.. .. $16 50

All Above, Half Dozen in a Box; Average Weight 1¾ Lbs. per Dozen

HARTFORD POCKET KNIVES

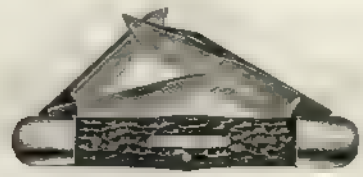
Cuts are two third Size

Per Dozen

No. 7608RB—Red and Black Celluloid Handle, Brass Lining and Rivets, Three Blades, German Silver Bolsters and Shield $16 50

Per Dozen

No. 7606S—Stag Handle; Three Blades; Brass Lining and Rivets, German Silver Bolsters and Shield..... $16 50



Per Dozen

No. 7605S—Stag Handle; Three Blades; Brass Lining and Rivets; German Silver Bolsters and Shield.....$16 00

Per Dozen

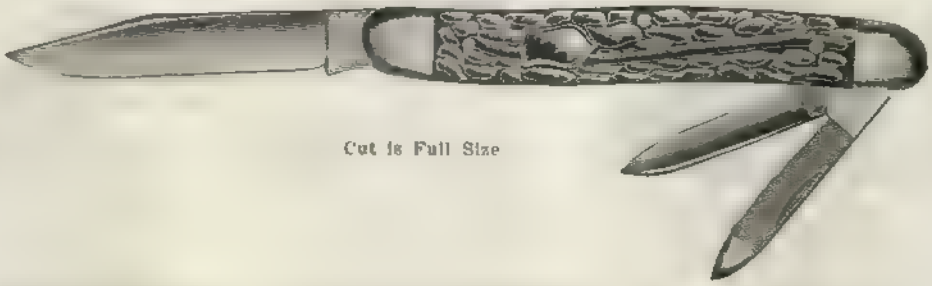
No. 7428S—Stag Handle, Three Blades; Brass Lining and Rivets; German Silver Bolsters and Shield..... $14.50

Per Dozen

No. 7662GM—Gun Metal Handle; Three Blades $14.40

Per Dozen

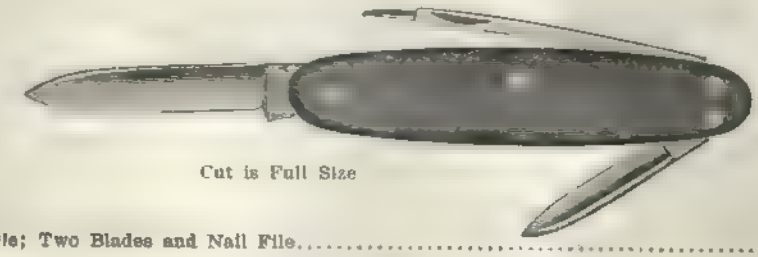
No. 7426GM—Gun Metal Handle; Three Blades; Brass Rivets.$14.00



Cut is Full Size

Per Dozen

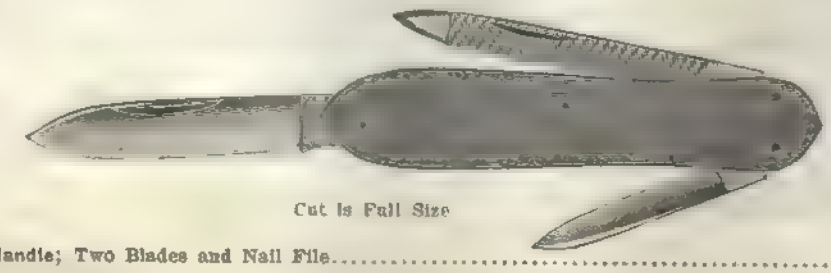
No. 7444S—Stag Handle; Three Blades, Brass Lining and Rivets, German Silver Bolsters and Shield $12.00



Cut is Full Size

Per Dozen

No. 7664GM—Gun Metal Handle; Two Blades and Nail File..... $14.40



Cut is Full Size

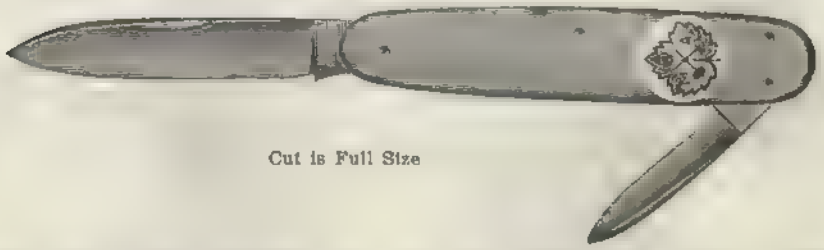
Per Dozen

No. 7665GM—Gun Metal Handle; Two Blades and Nail File..... $14.40

All Above, Half Dozen in a Box; Average Weight 1¾ Lbs. per Dozen

HARTFORD POCKET KNIVES

LODGE EMBLEMS



Cut is Full Size

Goldine Metal Handle; Two Blades, with Nail File on Back; Lodge Emblems in Colors

	Per Dozen
No. 8200—Knights of Columbus; Red, White, Blue and Gold Emblem	$30 00
No. 8201—Masonic; Black and Green Emblem	30 00
No. 8202—Benevolent Order of Elks; Brown, White, Blue and Gold Emblem	30 00
No. 8204—Modern Woodmen; Red, Green, White and Gold Emblem	30 00
No. 8205—United Commercial Travelers; Blue, White and Gold Emblem	30 00
No. 8206—Odd Fellows; Red, White, Blue and Gold Emblem	30 00
No. 8207—Knights of Pythias; Red, White, Blue and Gold Emblem	30 00
No. 8208—Loyal Order of Moose; Red and Gold Emblem	30.00

Cuts are Two-Third Size

Per Dozen

No. 7656Pl—Pearl Ivory Handle with K. of C. Emblem; Two Blades; Brass Lining and Rivets, German Silver Bolsters $14 00

Per Dozen

No. 7650P l—Pearl Ivory Handle with Masonic Emblem; Two Blades; Brass Lining and Rivets; German Silver Bolsters $14.00

No. 7648Pl—Sons of Norway Emblem; Otherwise same as above 14.00

Per Dozen

No. 7658P l—Pearl Ivory Handle with Modern Woodmen Emblem; Two Blades, Brass Lining and Rivets, German Silver Bolster $14.00

Per Dozen

No. 7660P l—Pearl Ivory Handle with Odd Fellows Emblem, Two Blades Brass Lining and Rivets, German Silver Bolsters $14 00

Per Dozen

No. 7652P l—Pearl Ivory Handle with Shriner Emblem; Two Blades, Brass Lining and Rivets; German Silver Bolsters $14 00

Per Dozen

No. 7654P l—Pearl Ivory Handle with Elks Emblem; Two Blades; Brass Lining and Rivets; German Silver Bolsters .$14.00

Per Dozen

No. 9200P—Pearl Handle; Two Blades, Brass Lining and Rivets; German Silver Bolsters..... $6 00

Per Dozen

No 9700P—Pearl Handle; Two Blades; Brass Lining; German Silver Rivets and Bolsters $18 00

Cut is Full Size

Per Dozen

No. 9701P—Pearl Handle, Two Blades, Brass Lining and Rivets, German Silver Bolsters and Shield $16 00

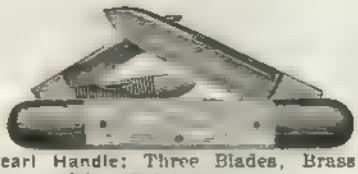
All Above, Half Dozen in a Box; Average Weight 1¾ Lbs. per Dozen

HARTFORD POCKET KNIVES

PEARL HANDLE

Cuts are two third Size -

Per Dozen
No. 9407P—Pearl Handle; Three Blades; Brass Lining and Rivets; German Silver Bolsters.....$12.00

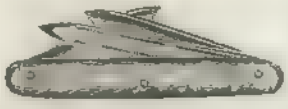


Per Dozen
No. 9404P—Pearl Handle; Three Blades, Brass Lining and Rivets; German Silver Bolsters.....$12.00

Per Dozen
No. 9400P—Pearl Handle; Three Blades; Brass Lining and Rivets; German Silver Bolsters.....$12.00

Per Dozen
No. 9408P—Pearl Handle; Three Blades; Brass Lining and Rivets; German Silver Bolsters.....$12.00

Per Dozen
No. 9402P—Pearl Handle; Four Blades Brass Lining and Rivets, German Silver Bolsters $12.00



Per Dozen
No. 9805P—Pearl Handle; Two Blades and Nail File; Brass Lining and Rivets; German Silver Tips; No Shield.....$14.40

Per Dozen
No. 9800P—Pearl Handle; Two Blades; Brass Lining; German Silver Bolsters and Rivets.....$24.00

Per Dozen
No. 9728P—Pearl Handle; Two Blades; Brass Lining and Rivets; German Silver Tips and Shield.....$20.00

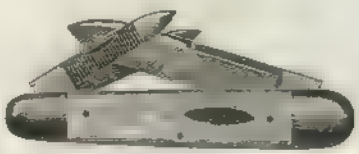
Per Dozen
No. 9802P—Pearl Handle; Two Blades; Brass Lining and Rivets; German Silver Bolsters.....$24.00

Per Dozen
No. 9806P—Pearl Handle; Three Blades; Brass Lining and Rivets; German Silver Bolsters.. .... $24.00

Per Dozen
No. 9726P—Pearl Handle; Four Blades; Brass Lining and Rivets; German Silver Bolsters and Shield.....$24.00

Per Dozen
No. 9718P—Pearl Handle; Three Blades; Brass Lining and Rivets; German Silver Bolsters.....$24.00

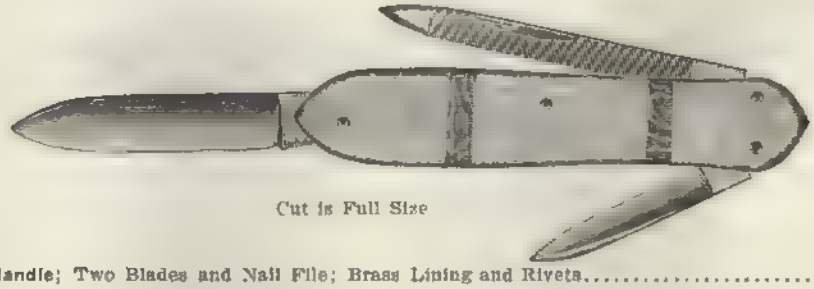
Per Dozen
No. 9721P—Pearl Handle; Three Blades; Brass Lining and Rivets; German Silver Bolsters and Shield.....$24.00



Per Dozen
No. 9722P—Pearl Handle; Three Blades; Brass Lining and Rivets; German Silver Bolsters and Shield.....$24.00

All Above, Half Dozen in a Box; Average Weight 1½ Lbs. per Dozen

HARTFORD POCKET KNIVES



Cut is Full Size

Per Dozen
No. 9811FP—Fancy Pearl Handle; Two Blades and Nail File; Brass Lining and Rivets.....$36.00

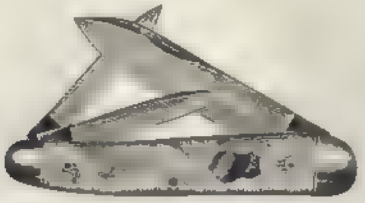
Cuts are two third Size

Per Dozen
No. 9812P—Fancy Pearl Handle; Two Blades; Brass Lining and Rivets $30 00

Per Dozen
No 9814P—Pearl Handle; Three Blades; Brass Lining and Rivets; German Silver Bolsters and Shield.....$30 00

Per Dozen
No. 9816P—Pearl Handle; Two Blades; German Silver Lining and Rivets $30.00

Per Dozen
No. 9819P—Pearl Handle; Three Blades; Brass Lining; German Silver Rivets and Bolsters.....$30 00



Per Dozen
No. 9820P—Pearl Handle; Three Blades; Brass Lining; German Silver Rivets and Bolsters.. .. .. . $32 00

Per Dozen
No. 9823P—Pearl Handle; Two Blades and Nail File on Back; Brass Lining and Rivets; No Shield.....$42.00

Per Dozen
No. 9824P—Pearl Handle; Three Blades; German Silver Lining, Rivets and Shield.....$42.00

Per Dozen
No. 9830P—Pearl Handle; Three Blades and File; German Silver Lining and Rivets.....$48.00

All Above, Half Dozen in a Box; Average Weight 2 Lbs. per Dozen

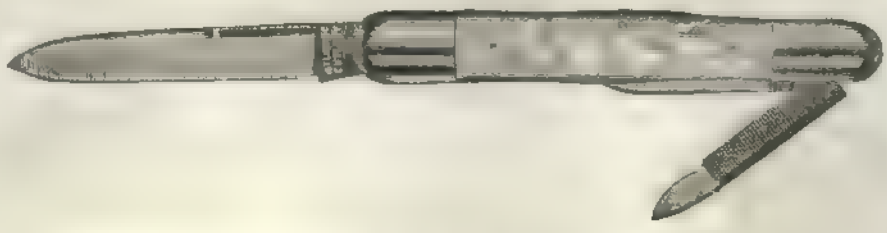
PEARL HANDLE POCKET KNIVES

	List Per Dozen	Retail Value Each
No. 12059P—Pearl Handle; Brass Lining and Rivets; German Silver Bolsters; Length 2¾ in.	$12.00	$0.75
No. 12060P—Pearl Handle; Brass Lining and Rivets; German Silver Bolsters; Length 2½ in	12.00	.75

	List Per Dozen	Retail Value, Each
No. 12092P—Pearl Handle; Two Blades, Brass Lining and Rivets, German Silver Bolsters	$15 00	$1.25

	List Per Dozen	Retail Value, Each
No. 12094P—Pearl Handle; Two Blades; Brass Lining and Rivets; German Silver Bolsters	$15.00	$1.25
No. 12093P—With Clip Blade, instead of Spear, Otherwise same as above	15 00	1.25

	List Per Dozen	Retail Value, Each
No. 12099P—Pearl Handle, Two Blades and File, Brass Lining, German Silver Bolsters	$12.00	$0 75



	List Per Dozen	Retail Value, Each
No. 12100P—Pearl Handle; Two Blades and File; Brass Lining and Rivets, German Silver Bolsters	$12.00	$0.75

	List Per Dozen	Retail Value, Each
No. 12101P—Pearl Handle; Three Blades; Brass Lining and Rivets; German Silver Bolsters	$12.00	$0.75
No. 12102P—Two Blades, Otherwise same as above.	10.00	.75

PEARL HANDLE POCKET KNIVES

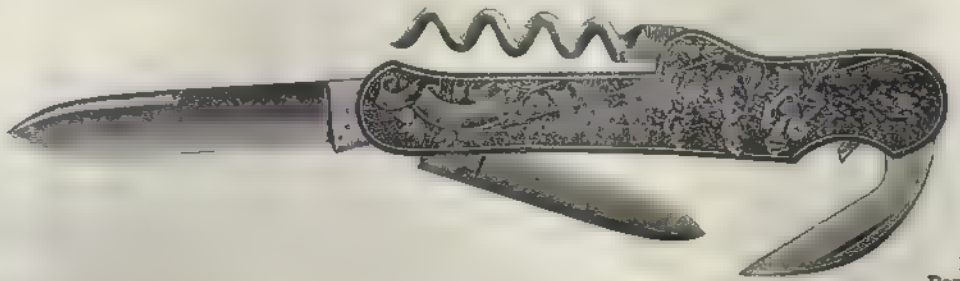
	List Per Dozen	Retail Value, Each
No. 12104P—Pearl Handle, Two Blades; Brass Lining and Rivets, German Silver Bolsters	$12.00	$0.75

	List Per Dozen	Retail Value, Each
No. 12105P—Pearl Handle; Two Blades, Brass Lining and Rivets, German Silver Bolsters	$10.00	$0.75

	List Per Dozen	Retail Value, Each
No. 12106P—Pearl Handle; Two Blades, Brass Lining and Rivets, German Silver Bolsters	$10 00	$0.75

	List Per Dozen	Retail Value, Each
No. 12107P—Pearl Handle; Two Blades; Brass Lining	$10 00	$0.75

	List Per Dozen	Retail Value, Each
No. 12108P—Pearl Handle; Two Blades; Brass Lining and Rivets, German Silver Bolsters	$10.00	$0.75



	List Per Dozen	Retail Value Each
No. 12018—Silver Metal Handle; Two Blades; Champagne Crown Seal Lifter and Wire Breaker Cork Screw .... Weight 1⅛ Lbs. per Dozen	$24 00	$1.75

All Above, Half Dozen in a Box; Average Weight 2½ Lbs. per Dozen

POCKET KNIVES

	List Per Dozen	Retail Value Each
No. 12091M—Bright Metal Handle; Assorted Patterns	$0.80	$0.05

Per Dozen

No. 5034S—Stag Handle; Three Blades; Brass Lining; German Silver Bolsters and Shield $6.50
No. 5034E—Ebony Handle, Otherwise same as above 6.50

Per Dozen

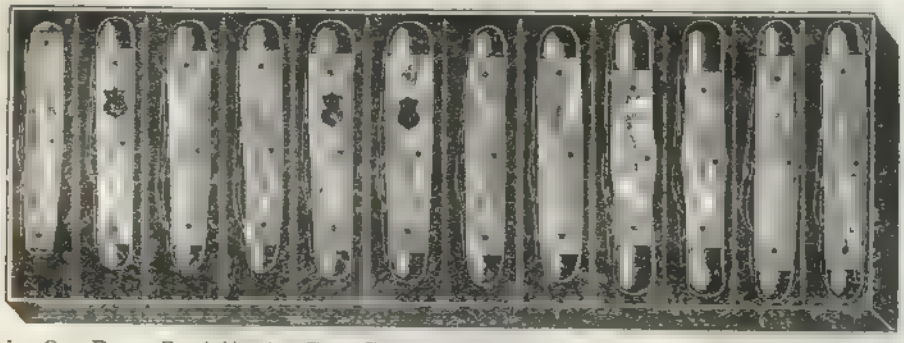
No. 12011—Metal Handle; One Blade, with Chain 15 in. Long. $1.20
Weight ¾ Lb. per Dozen

Per Assortment

No. 1—Assortment contains One Dozen Pearl Handle, Two Blade Pen Knives; Steel Lining, Rivets and Bolsters; on Attractive Display Card, 9¾x7 in.; Weight ½ Lb. per Dozen $4.50

Per Assortment

No. 2—Assortment contains One Dozen Pearl Handle, Two, Three and Four Blade Knives, in a Plush Lined Display Roll $12 00
Weight ½ Lb. per Assortment



Per Assortment

No. 3—Assortment contains One Dozen Pearl Handle, Two, Three and Four Blade Knives, Brass Lining; In Velvet Lined, Partitioned Display Box, 10¾x3¾ in $20 00

Weight 1 Lb. per Dozen

ZENITH SADDLES

Realizing the many points in favor of a saddle Factory in the far West, we have moved our Saddle Factory to Portland, Oregon. The home of the saddle is in the far West: In the far West more attention is being paid to perfecting the tanning of saddle or skirting leather and the making of trees to properly fit horse and rider. The saddle maker learns many points of value in making saddles from the hard riding cowboy who he comes in personal contact with.

At Portland we have gathered together a crew of expert saddle makers who have had practical experience, and there is nothing in the line of Saddles or equipment that we cannot make.

In designing our new Line we have endeavored to show only such saddles as will meet with ready sale.

Aside from the line shown in our catalog we are prepared to make special saddles to order on short notice.

Leather—We use the best grades of California and Oregon skirting.

Trees—Our trees are made in Portland and to our special order, and are guaranteed not to hurt horse or man. Aside from trees listed, we can supply saddles on any standard tree on short notice.

Horns—Nothing but steel horn trees used.

Strainers—We use a heavy steel strainer on all our saddles, making a seat that will "stand up" under the hardest usage.

Seats—You will notice that we do not make a pieced or "three quarter" seat on any of our line. All seats and cantles being cut in one piece makes a much more satisfactory job.

Rigs—All angle rig saddles are made with "three quarter" or "Montana" rig. Can supply "center fire" rigs if preferred.

CHANGES IN SADDLES

In making up our line of Saddles we have tried to get a saddle to fit every requirement, but as we still find that changes do have to be made we have made up a list of changes showing the extra cost for same.

CHANGES IN TREES

For Madero Tree where Montana, Ellensburg, Linkville, Buffalo or Colorado Nelson are listed add to list $4.00. For any of above trees where James or Idaho Tree is listed add to list $2.00

No changing of Trees where Saddles list at less than $60.00

Extras

	Each
Bucking Rolls	$3.50
Quilted Seats	1.00
Double Stirrup Leathers	2.00
Rawhide Braided Horns	1.00
Rawhide Bound Cantles	1.00
Nickel or Brass Horns	3.00
Double Rigs	4.00
Red or Black Leather	1.00

Our stock sizes of Saddles are 14 and 14½ for square skirts and 13½ and 14 for round skirts. Any other sizes will be made to order

TERMS USED IN DESCRIBING RIDING SADDLES

Cantle—The upright part of the Saddle which forms a back to the seat.

Cinch—Spanish "Cincha;" A broad Saddle Girth, usually of Horse hair, Webbing or Cordage, for securing the Saddle on the horse, see definitions of Rigging.

Fenders—Spanish "Rosaderos" or "Sudaderos," The wide Leathers extending from the Body of the Saddle to the Stirrups, to keep the Rider's Legs from contact with the horse.

Flaps—That part of an English Saddle which corresponds with the Fenders on the Western Stock Saddle see above.

Front—The forward curved part of the Saddle, the wide Bulge acts as a Bucking Roll.

Gullet—The Throat or open part formed by the Front, to give room on horse's withers.

Horn or Pommel—The Knob or upward Horn-like Projection at the front of the Saddle; also the highest part of the front, if without Horn.

Jockeys—The Seat Flaps, covering the Rigging. The extensions or flaps on sides of Seat.

Knee Rolls or Puffs—Used on English Men's and Ladies' Astride Saddles, as cushions for the knees.

Lariat Strap—A small Strap, attached at the right hand side of the Front, for carrying the Lariat Rope.

Latigos—Straps for tightening the Cinches.

Latigo Tie Strings—Used in lacing Saddles together and left extra length for ornamentation. Also, can be used for tying bundles, coats, etc., to Saddle.

Niggerhead—A Triangular or Round Shaped Piece of Leather with a slot cut in same, in which the end of the Tie Strap is sometimes secured.

Panel or Pad—That part of an English Saddle which forms a cushion under the Tree to protect the horse's back.

Definition of Rigging

A Center Fire Rig or Single Center Rig is made with a Ring placed in the center of the Tree and close to the Bar, with a Latigo Strap on both sides, to tie.

A Three-Quarter Rig sometimes called **Montana Rig**, (Furnished as regular is made with a larger Ring placed so that the Stirrup Leather, after it leaves the under side of the Bar, passes through the Rig; Latigo Straps to tie on both sides.

A Double Rig has two Cinches with Straps to Tie or Buckle, according to the grade of the Saddle. Front Cinch is enough forward the center to escape the Stirrup Leather, the Flank Cinch is directly under the Cantle.

Rosettes—Small, Pinked Edge, Leather Washers, which help to hold the Saddle together and prevent the Latigo Strings from pulling through.

Seats, Defined as Applying to Horn Saddles Only

Half Seat is built up to the Stirrup Leathers. The Stirrup Leathers pass around the bar free of the seat.

Loop and Solid Seats—All our Saddles have the Seat, Cantle and Jockeys cut from one solid piece of leather, instead of making it in two parts and using inferior leather for the Cantle, as is often done. Some Manufacturers call a saddle made with pieced cantle **three-quarter Seat. The Stirrup Leathers** are put on in two ways: When the Stirrup Leathers go under the Jockey, up through the Seat and Loop back around the Bars, leaving a solid center piece, it is known as a **Loop Seat.** When the Stirrup Leathers go under the Jockey and Seat, around the Bar, not showing on top at all, it is known as a **Solid Seat.**

Skirts—Spanish "Bastos"; That part of the Saddle which is attached to the Saddle Tree Bars and forms the covering for the horse's back; Made both Round and Square, Lined and Unlined, the shorter upper skirt is also called a Housing.

Stirrup Leathers—The Straps for suspending the Stirrups from the Tree Bars,

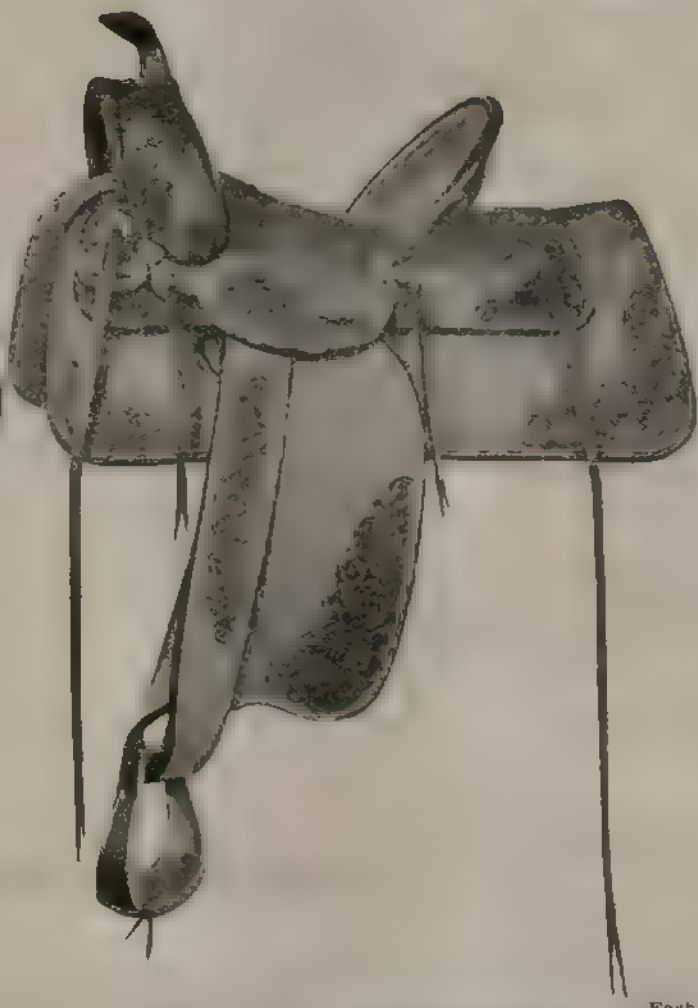
Stirrups—The foot-rests suspended from the sides of the Saddle to aid in mounting; to balance the Rider and ease the horse's gait.

Strainer—A Steel Re-inforcement of the Seat and [illegible] Tree.

Tapaderos—A Spanish name for the Leather Hooded Stirrups; Made in two styles commonly known as "Monkey-Nose" and "Bull Dog," we furnish Monkey-Nose regularly and ship Bull Dog only on special orders.

Tree—The wood Frame Work or Body of the Stock Saddle consisting of Horn or Pommel, Side Bars or Seat and Cantle; usually covered with oil tanned Beef Hide, laced and shrunk on smooth and tightly.

ZENITH STOCK SADDLES



	Each
No. 950 —SQUARE SKIRTS; THREE QUARTER RIG	$105 00
No. 950R—ROUND SKIRTS; THREE QUARTER RIG	103.00

Weight About 35 Lbs. Each

Full Hand Flower Stamped

Made of the finest grade of California Skirting Leather, by our best Workmen

Tree—Montana; 14 or 14½ in., Heavy Beef Hide Covered; 15½ in. Bulge Front.

Horn—Steel, Leather Covered and Hand Sewed.

Seat—Solid, with Seat, Jockeys and Cantle, One Piece; Hand Sewed and Bound Cantle.

Skirts—Square, 28 in. Long, 14½ in. Deep, Wool Lined; Round, same shape as No. 815R, shown on Page 3715.

Fenders—9 in. Wide, 18 in. Long.

Latigos—2 in. Latigo Leather, to tie on one side and 2 in. Skirting Leather to buckle on other, or can be made with both Long Latigos, if so ordered.

Stirrup Leathers—3 in., Half Double.

Stirrups—No. 39L, 2 in., Brass Bound, Leathered.

Cinch—No 255, New Idea Cotton with Flower Stamped, Wool Lined Leathers; One Buckle Tongue.

Rig—Three Quarter, with No. 0 Four in. Brass Plated Rings.

Option on Trees—

The following Trees can be had at no extra charge: Colorado, Nelson, Buffalo, Linkville or Ellensburg.

If wanted with Madero Tree, add $4 00 to list.

In wanted with Rawhide Braided Horn, add $1.00 to list.

	Each
No. 940 —SQUARE SKIRTS; THREE QUARTER RIG	$100 00
No. 940R—ROUND SKIRTS; THREE QUARTER RIG.	98.00

Weight About 40 Lbs. Each

Hand Flower Stamped

Made of extra select California Skirting Leather, by our best Workmen

Tree—Linkville; 14 or 14½ in., Heavy Beef Hide Covered; 15½ in. Bulge Front.

Horn—Steel, Leather Covered and Hand Sewed.

Seat—Solid, with Seat, Jockeys and Cantle, One Piece; Hand Sewed and Bound Cantle.

Skirts—Square, 29 in. Long, 15 in. Deep; Wool Lined and Double Sewed; Round, same shape as No. 815R, shown on Page 3716.

Fenders—9 in. Wide, 18 in. Long.

Latigos—2 in. Latigo Leather, to tie on one side; 2 in. Skirting Leather to buckle on other side.

Stirrup Leathers—3 in. Half Double, to Lace.

Stirrups—No. 39L, 2 in. Brass Bound, Leathered.

Cinch—No. 255WB, New Idea; Fish Cord Cotton, with Wool Lined Leathers; One Buckle Tongue.

Rig—Three Quarter, with No. 0 Brass Plated Rings.

Option on Trees—

The following Trees can be had at no extra charge: Montana, Colorado Nelson, Buffalo or Ellensburg.

If wanted with Madero Tree, add $4 00 to list.

If wanted with Rawhide Braided Horn, add $1 00 to list.

For Extras and Changes, see Page 3711

ZENITH STOCK SADDLES

Each

No. 910 —SQUARE SKIRTS; THREE QUARTER RIG.....$92.00
No. 910R—ROUND SKIRTS; THREE QUARTER RIG ... 90.00

Weight About 40 Lbs. Each

Full Hand Stamped; Made of the finest grade of California Skirting Leather, by our best Workmen

Tree—Montana; 14 or 14½ in. Heavy Beef Hide Covered; 15½ in. Bulge Front.

Horn—Steel, Leather Covered and Hand Sewed.

Seat—Solid, with Seat, Jockeys and Cantle, One Piece; Hand Sewed and Bound Cantle.

Skirts—Square, 29 in. Long, 15 in. Deep, Wool Lined; Round, same shape as No. 815R, shown on Page 3716.

Fenders—9 in. Wide, 18 in. Long.

Latigos—2 in. Latigo Leather, to tie, on one side and 2 in. Skirting Leather, to buckle, on other side, or can be made with both Long Latigos, if so ordered.

Stirrup Leathers—3 in., Half Double.

Stirrups—No. 39L, 2 in. Brass Bound, Leathered.

Cinch—No. 255, New Idea Cotton, with Wool Lined Leathers; One Buckle Tongue.

Rig—Three Quarters, with No. 0 Four in. Brass Plated Rings.

Option on Trees—

The following Trees can be had at no extra charge: Colorado Nelson, Buffalo, Linkville or Ellensburg.

If wanted with Madero Tree, add $4.00 to list.
If wanted with Rawhide Braided Horn, add $1.00 to list.

Each

No. 930 —SQUARE SKIRTS; THREE QUARTER RIG.....$92.00
No. 930R—ROUND SKIRTS; THREE QUARTER RIG..... 90.00

Weight About 40 Lbs. Each

Hand Stamped; Made of the finest California Skirting Leather

Tree—Montana; 14 or 14½ in. Heavy Beef Hide Covered; 15½ in. Bulge Front.

Horn—Steel, Leather Covered and Latigo Wrapped with Cap Hand Sewed.

Seat—Solid, with Seat, Jockeys and Cantle, One Piece; Hand Sewed and Bound Cantle.

Skirts—Square, 29 in. Long, 15 in. Deep, Wool Lined, Round, same shape as No. 815R, shown on Page 3716.

Fenders—9 in. Wide, 18 in. Long.

Latigos—2 in. Latigo Leather, to tie, on one side and 2 in. Skirting Leather, to buckle, on other side, or can be made with both Long Latigos, if so ordered.

Stirrup Leathers—3 in., Half Double.

Stirrups—No. 39L, 2 in. Brass Bound, Leathered.

Cinch—No. 255, New Idea Cotton, with Wool Lined Leather Ends, One Buckle Tongue.

Rig—Three Quarters, with No. 0 Four in. Brass Plated Rings

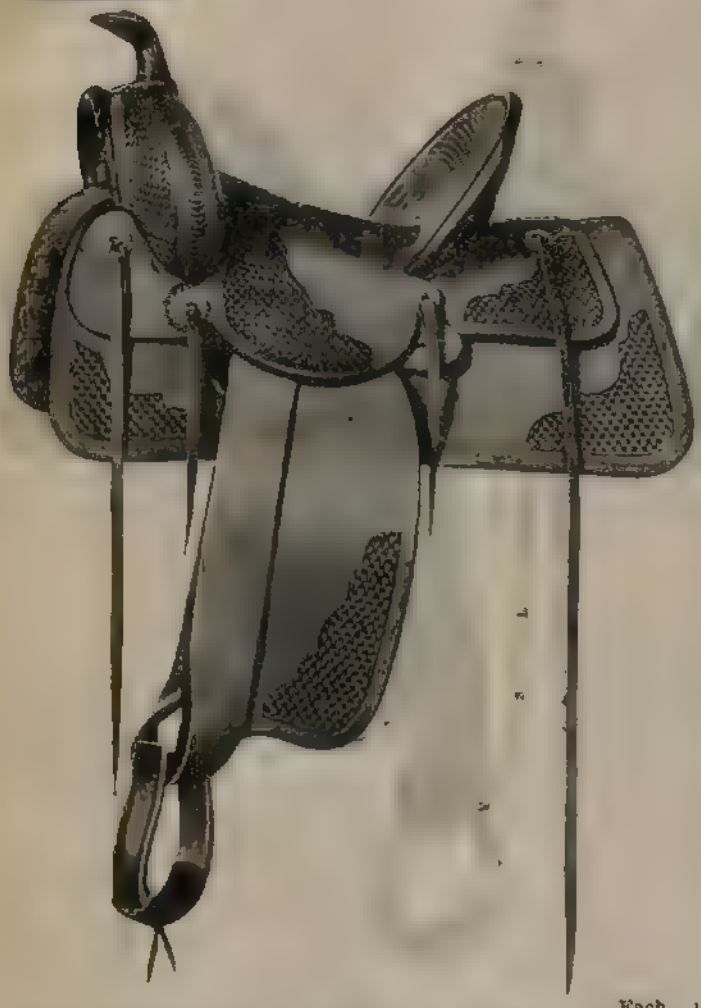
Option on Trees—

The following Trees can be had at no extra charge: Colorado Nelson, Buffalo, Linkville, Ellensburg, Maraweile or Colorado Visalia.

If wanted with Madero Tree, add $4.00 to list.
If wanted with Rawhide Braided Horn, add $1.00 to list.

For Extras and Changes, see Page 3711

ZENITH STOCK SADDLES



	Each
No. 840 —SQUARE SKIRTS; THREE QUARTER RIG	$88.00
No. 840R—ROUND SKIRTS; THREE QUARTER RIG	86.00

Weight About 35 Lbs. Each

Made of best grade California Skirting Leather

Tree—Madero; 14 or 14½ in. Heavy Beef Hide Covered; 16½ in. Bulge Front.

Horn—Steel, Leather Covered, Hand Sewed Cap.

Seat—Solid, with Seat, Jockeys and Cantle, One Piece; Hand Sewed, Bound Cantle.

Skirts—Square, 28 in. Long, 14 in. Deep; Wool Lined; Round, same shape as No. 815R, shown on Page 3716.

Fenders—9 in. Wide, 18 in. Long.

Latigos—2 in. Latigo Leather, to tie, one one side, 2 in. Skirting Leather, to buckle, on other side, or can be had with Both Long Latigos, if wanted.

Stirrup Leathers—3 in. Half Double.

Stirrups—No. 39L, 2 in. Brass Bound, Leathered.

Cinch—No. 255, New Idea Cotton, with Wool Lined Leather Ends One Buckle Tongue.

Rig—Three Quarter, with No. 0 Four in. Brass Plated Rings.

Option on Trees—

The following Trees can be had at $4.00 list less than the above: Montana, Colorado Nelson, Buffalo, Linkville, Ellensburg, Marswells or Colorado Visalia.

If wanted with Rawhide Braided Horn, add $1.00 to list.

	Each
No. 875 —SQUARE SKIRTS	$84.00
No. 875R—ROUND SKIRTS	82.00

Weight About 35 Lbs. Each

Hand Flower Stamped Horseshoes; Made of finest grade of California Skirting Leather

Tree—Montana; 14 or 14¼ in. Beef Hide Covered; 15½ in. Bulge Front.

Horn—Steel, Leather Covered, Hand Sewed Cap.

Seat—Solid, with Seat, Jockeys and Cantle, One Piece; Hand Sewed, Bound Cantle

Skirts—Square, 28 in. Long, 14½ in. Deep; Round, same shape as No. 815R, shown on Page 3716.

Fenders—9 in. Wide, 18 in. Long.

Latigos—1¾ in. Latigo Leather, to tie, on one side; 2 in. Skirting Leather, to buckle, on the other side.

Stirrup Leathers—3 in. Half Double.

Stirrups—No. 39L, 2 in. Brass Bound, Leathered.

Cinch—No. 255WB, New Idea Cotton, with Wool Lined Leather Ends; One Buckle Tongue.

Rig—Three Quarter, with No. 0 Four in. Brass Plated Rings.

Option on Trees—

The following Trees can be had at no extra charge: Colorado Nelson, Buffalo, Linkville, Ellensburg, Marswells or Colorado Visalia.

If wanted with Madero Tree, add $4.00 to list.

If wanted with Rawhide Braided Horn, add $1.00 to list.

For Extras and Changes, see Page 3711

ZENITH STOCK SADDLES

	Each
No. 890 —SQUARE SKIRTS; THREE QUARTER RIG	$86.00
No. 890R—ROUND SKIRTS; THREE QUARTER RIG	84.00

Weight About 35 Lbs. Each

Hand Border Stamped; Made of finest grade of California Skirting Leather

Tree—Colorado Nelson; 14 or 14½ in. Beef Hide Covered; 15 in. Bulge Front.

Horn—Solid Brass.

Seat—Solid, with Seat, Jockeys and Cantle, One Piece; Hand Sewed and Bound Cantle

Skirts—Square, 28 in. Long, 14 in. Deep; Round, same pattern as No. 700R, shown on Page 3718.

Fenders—9 in. Wide, 18 in. Long

Latigos—1¾ in. Latigo Leather, to tie, on one side, 2 in. Skirting Leather, to buckle, on other side.

Stirrup Leathers—3 in., Half Double.

Stirrups—No. 39L, 2 in. Brass Bound, Leathered

Cinch—No. 255WB, New Idea Fish Cord, Wool Lined Leather Ends; One Buckle Tongue.

Rig—Three Quarter, with No. 0 Four in. Brass Plated Ring.

Option on Trees—

The following Trees can be had at no extra charge: Montana, Buffalo, Linkville, Ellensburg, Marswells or Colorado Visalia.

If wanted with Leather Covered Horn, deduct $2.00 list.

If wanted with Rawhide Braided Horn, deduct $1.00 list.

	Each
No. 820 —SQUARE SKIRTS; THREE QUARTER RIG	$84.00
No. 820R—ROUND SKIRTS; THREE QUARTER RIG	82.00

Weight About 35 Lbs. Each

Hand Corner Stamped; Made of the finest grade California Skirting Leather

Tree—Colorado Nelson; 14 or 14½ in. Heavy Beef Hide Covered. 15 in. Bulge Front.

Horn—Steel, Leather Covered and Hand Sewed.

Seat—Solid, with Seat, Jockeys and Cantle, One Piece; Hand Sewed and Bound Cantle

Skirts—Square, 27 in. Long, 14 in. Deep, Wool Lined. Round, same pattern as No. 815R, shown on Page 3716.

Fenders—9 in. Wide, 18 in. Long.

Latigos—1¾ in. Latigo Leather, to tie, on one side, and 2 in. Skirting Leather, to buckle, on other side

Stirrup Leathers—3 in., Half Double

Stirrups—No. 39L, 2 in. Brass Bound, Leathered.

Cinch—No. 398L, Hard Fish Cord Cotton, Leather Ends, with One Buckle Tongue

Rig—Three Quarter, with No. 0 Four in. Brass Plated Ring.

Option on Trees—

The following Trees can be had at no extra charge: Montana, Buffalo, Linkville, Ellensburg, Marswells or Colorado Visalia.

If wanted with Madero Tree, add $4.00 to list.

If wanted with Rawhide Braided Horn, add $1.00 to list.

For Extras and Changes, see Page 3711.

ZENITH STOCK SADDLES

Each

No. 815 —SQUARE SKIRTS; THREE QUARTER RIG.. . $82.00
No. 815R—ROUND SKIRTS; THREE QUARTER RIG..... 80.00

Weight About 35 Lbs. Each

Hand Waffle Stamped; Made of finest grade of California Skirting Leather

Tree—Montana; 14 or 14½ in. Hide Covered; 15½ in. Bulge Front
Horn—Steel, Rawhide Braided.
Seat—Solid, with Seat, Jockeys and Cantle, One Piece; Hand Sewed and Bound Cantle.
Skirts—Square, 27 in. Long, 14 in. Deep; Round, Butterfly Pattern, Wool Lined
Fenders—9 in. Wide, 18 in. Long.
Latigos—1¾ in. Latigo Leather, to tie, on one side; 2 in. Skirting Leather, to buckle, on other, or can be had with Both Tie Latigos, if so ordered.
Stirrup Leathers—2 in., Half Double
Stirrups—No. 30L, 1½ in. Brass Bound, Leathered.
Cinch—No. 255, New Idea Hard Cotton, Leathered Ends, One Buckle Tongue.
Rig—Three Quarter
Option of Trees—
Linkville, Colorado Nelson, or Ellensburg at same price.
If wanted with Leather Covered Horn, deduct $1.00 list.

No. 800 —SQUARE SKIRTS; THREE QUARTER RIG.....$82.00
No. 800R—ROUND SKIRTS; THREE QUARTER RIG..... 80.00

Weight About 35 Lbs. Each

Hand Stamped Star & Crescent

Made of finest grade California Skirting Leather

Tree—Montana; 14 or 14½ in. Hide Covered; 15½ in. Bulge Front.
Horn—Steel, Rawhide Braided
Seat—Solid, with Seat, Jockeys and Cantle, One Piece; Hand Sewed and Bound Cantle
Skirts—Square, 27 in. Long, 14 in. Deep; Round, Butterfly Pattern, Wool Lined
Fenders—9 in. Wide, 18 in. Long.
Latigos—1¾ in. Latigo Leather, to tie.
Stirrup Leathers—2 in., Half Double.
Stirrups—No. 30L, 1½ in. Brass Bound, Leathered.
Cinch—No. 287L, Diamond Center Hair, Leather Ends.
Rig—Three Quarter.
Option of Trees—
Colorado Nelson, Ellensburg or Linkville at same price.
If wanted with Leather Covered Horn, deduct $1.00 list.

For Extras and Changes, see Page 3711

ZENITH STOCK SADDLES

Each

No. 780 —SQUARE SKIRTS; THREE QUARTER RIG.....$78.00
No. 780R—ROUND SKIRTS ;THREE QUARTER RIG..... 76.00

Weight About 35 Lbs. Each

Hand Stamped Border

Tree—Montana; 14 or 14½ in. Hide Covered; 15½ in. Bulge Front.
Horn—Steel, Leather Covered and Hand Sewed.
Seat—Solid, with Seat, Jockeys and Cantle, One Piece; Hand Sewed and Bound Cantle.
Skirts—Square, 27 in. Long, 14 in. Deep, Wool Lined; Round, same as No. 700R, shown on Page 3718.
Fenders—9 in. Wide, 18 in. Long.
Latigos—1¾ in. Latigo Leather, to tie, on one side; 1¾ in. Skirting Leather, to buckle, on the other side.
Stirrup Leathers—3 in., Half Double.
Stirrups—No. 39L, 2 in. Brass Bound, Leathered.
Cinch—No. 398L, Hard Fish Cord Cotton, with Leathered Ends; One Buckle Tongue.
Rig—Three Quarter.
Option on Trees—
The following Trees can be had at no extra charge: **Colorado Nelson, Buffalo, Linkville, Ellensburg, Marswells or Colorado Visalia.**
If wanted with Madero Tree, add $1.00 to list.
If wanted with Rawhide Braided Horn, add $1.00 to list.

No. 750R—ROUND SKIRTS; THREE QUARTER OR CENTER FIRE RIG $78.00

Weight About 30 Lbs. Each

Hand Flower Stamped

Tree—Idaho; 13½ or 14 in. Hide Covered, 14 in. Bulge, Low Front and Cantle.
Horn—Steel, Latigo Leather Wrapped; Two Sizes of Horn Cap, either 2⅛ in. or 2¾ in.
Seat—Solid, with Seat, Jockeys and Cantle, One Piece; Hand Sewed and Bound Cantle.
Skirts—Round, Close Wool Lined.
Fenders—7½ in. Wide, 17 in. Long.
Latigos—1½ in. Long, to tie.
Stirrup Leathers—2¾ in. Arizona, Double.
Stirrups—No. 30L, 1½ in. Brass Bound, Leathered.
Cinch—No. 265L, New Idea Fish Cord Cotton, Leathered.
Rig—Rawhide Lined, either Three Quarter or Center Fire.

If wanted with Rawhide Braided Horn, add $1.00 to list.

For Extras and Changes, see Page 3711

ZENITH STOCK SADDLES

Each

No. 700 —SQUARE SKIRTS; THREE QUARTER RIG.....$77.00
No. 700R—ROUND SKIRTS; THREE QUARTER RIG..... 75.00

Weight About 30 Lbs. Each

Tree—Montana; 13½ or 14 in., Hide Covered; 15 in. Bulge Front.
Horn—Steel, Leather Covered; Latigo Wrapped, Cap Leather Covered and Hand Sewed
Seat—Solid, with Seat, Jockeys and Cantle in One Piece; Hand Sewed and Bound Cantle
Skirts—Square, 27 in. Long, 14 in. Deep, Wool Lined; Round, Close Wool Lined.
Fenders—8½ in. Wide, 18 in. Long.
Latigos—1¾ in. Latigo Leather, to tie
Stirrup Leathers—3 in., Half Double, to lace.
Stirrups—No. 30L, 1½ in. Brass Bound, Leathered.
Cinch—No. 287L, Diamond Center Hair; Leathered Ends.
Rig—Three Quarter.
Option on Trees—
The following Trees can be had at no extra charge: Ellensburg, Colorado Nelson or Linkville, at same price.
If wanted with Rawhide Braided Horn, add $1.00 to list.

Each

No. 740 —SQUARE SKIRTS; THREE QUARTER RIG.....$77.00
No. 740R—ROUND SKIRTS; THREE QUARTER RIG..... 75.00

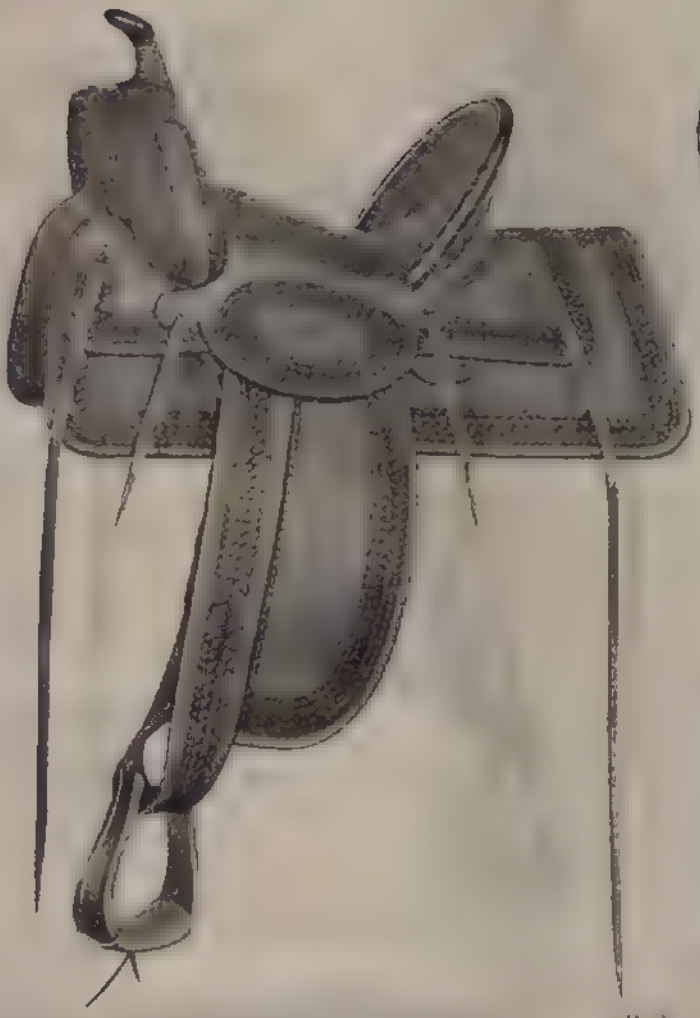
Weight About 30 Lbs. Each

Corner Flower, Hand Stamped

Tree—James; 13½ or 14 in., Hide Covered; 14 in. Bulge Front.
Horn—Steel, Leather Covered and Hand Sewed.
Seat—Solid, with Seat, Jockeys and Cantle, One Piece; Hand Sewed and Bound Cantle
Skirts—Square, 27 in. Long, 14 in. Deep, Wool Lined; Round, Close Cut, Wool Lined
Fenders—7½ in. Wide, 17 in. Long.
Latigos—1½ in. Long, to tie.
Stirrup Leathers—2¾ in., Half Double, to lace.
Stirrups—No. 30L, 1½ in Brass Bound, Leathered.
Cinch—No. 285W, Hair Diamond Center, Wool Lined Leathers.
Rig—Three Quarter
Option on Trees—
If wanted with Montana or Ellensburg Tree, add $2.00 to list.
If wanted with Rawhide Braided Horn, add $1.00 to list.

For Extras and Changes, see Page 3711

ZENITH STOCK SADDLES



Each

No. 725 —SQUARE SKIRTS; THREE QUARTER RIG..... $73.00
No. 725R—ROUND SKIRTS; THREE QUARTER RIG..... 71.00

Weight About 33 Lbs. Each

Tree—Buffalo; 14 or 14½ in., Hide Covered, 15 in. Bulge Front.
Horn—Steel, Rawhide Braided
Seat—Solid, with Seat, Jockeys and Cantle, One Piece, Rawhide Bound Cantle and Front
Skirts—Square, 27 in. Long, 14 in. Deep, Wool Lined; Round, Close Cut, Wool Lined.
Fenders—9 in. Wide, 18 in. Long.
Latigos—1⅜ in. Latigo Leather, to tie, on one side; 1¾ in. Skirting Leather, to buckle, on other side
Stirrup Leathers—3 in., Half Double, to lace
Stirrups—No. 42L, 2 in. Galvanized Steel Bound, Leathered
Cinch—No. 398LB, Hard Fish Cord Cotton, Leather Ends; One Buckle Tongue
Rig—Three Quarter

Each

No. 650R—ROUND SKIRTS; THREE QUARTER OR CENTER FIRE RIG $66.00

Weight About 28 Lbs. Each

Tree—James; 13½ or 14 in., Hide Covered, 14 in. Bulge Front.
Horn—Steel, Latigo Leather Wrapped
Seat—Solid, with Seat, Jockeys and Cantle, One Piece; Hand Sewed and Bound Cantle
Skirts—Round, Close Cut, Wool Lined
Fenders—7½ in. Wide, 17 in. Long
Latigos—1½ in. Latigo Leather, to tie
Stirrup Leathers—2¾ in., Half Double, to lace.
Stirrups—No. 32L, 1¾ in. Galvanized Steel Bound, Leathered
Cinch—No. 161L, 18 Strand Hair, Leathered
Rig—Three Quarter or Center Fire, Rawhide Lined.
Option on Trees—
If wanted with Idaho Tree, same price as above.
If wanted with Rawhide Braided Horn, add $1.00 to list.

For Extras and Changes, see Page 3711

ZENITH STOCK SADDLES

	Each
No. 640 —SQUARE SKIRTS; THREE QUARTER RIG..	$66.00
No. 640R—ROUND SKIRTS; THREE QUARTER RIG ..	64.00

Weight About 30 Lbs. Each

Tree—James; 13½ or 14 in., Hide Covered; 14 in. Bulge Front

Horn—Steel, Leathered Covered and Hand Sewed.

Seat—Solid, with Seat, Jockeys and Cantle in One Piece; Hand Sewed and Bound Cantle

Skirts—Square, 27 in. Long, 13½ in. Deep, Wool Lined; Round, Close Cut.

Fenders—7½ in. Wide, 17½ in. Long.

Latigos—1½ in. Latigo Leather, to tie.

Stirrup Leathers—2¾ in., Half Double, to lace.

Stirrups—No. 32L, 1½ in. Galvanized Steel Bound, Leathered.

Cinch—No. 161L, 18 Strand Hard Hair, Leathered

Rig—Three Quarter, Rawhide Lined and Laced.

	Each
No. 605 —SQUARE SKIRTS; THREE QUARTER RIG..	$64.00
No. 605R—ROUND SKIRTS; THREE QUARTER RIG...	62.00

Weight About 30 Lbs. Each

Tree—James; 14 or 14½ in., Hide Covered; 14 in. Bulge Front.

Horn—Steel, Leather Covered and Hand Sewed.

Seat—Solid, with Seat, Jockeys and Cantle in One Piece; Cantle Bound

Skirts—Square, 27 in. Long, 13½ in. Deep, Wool Lined; Round, Close Cut.

Fenders—8 in. Wide, 18 in. Long.

Latigos—1½ in. Latigo Leather, to tie, on one side; 1½ in. Skirting Leather, to buckle, on other side.

Stirrup Leathers—3 in., Half Double, to lace.

Stirrups—No. 41L, 1½ in. Galvanized Steel Bound, Leathered.

Cinch—No. 398L, Fish Cord Cotton, Leathered Ends; One Buckle Tongue.

Rig—Three Quarter.

For Extras and Changes, see Page 3711

ZENITH STOCK SADDLES

No. 600R—ROUND SKIRTS; THREE QUARTER OR CENTER FIRE RIG $59.00

Weight About 25 Lbs. Each

Hand Flower Stamped

Tree—Bear; 13½ or 14 in., Hide Covered; 12 in. Bulge Front

Horn—Steel, Latigo Leather Wrapped

Seat—Solid, with Seat, Jockeys and Cantle, One Piece; Bound Cantle.

Skirts—Round, Close Cut, Wool Lined.

Fenders—7½ in. Wide, 17 in. Long.

Latigos—1½ in. Latigo Leather, to tie.

Stirrup Leathers—2½ in. Half Double, to lace.

Stirrups—No. 32L, 1½ in. Galvanized Steel Bound, Leathered.

Cinch—No. 161L, 18 Strand Hard Hair, Leathered.

Rig—Three Quarter or Center Fire.

No. 580R ROUND SKIRTS; THREE QUARTER OR CENTER FIRE RIG $56.00

Weight About 25 Lbs. Each

Hand Flower Stamped

Tree—Bear; 13½ or 14 in., Hide Covered; 12 in. Bulge Front

Horn—Steel, Latigo Leather Wrapped.

Seat—Solid, with Seat, Jockeys and Cantle, One Piece; Bound Cantle.

Skirts—Round, Close Cut, Wool Lined.

Fenders—7½ in. Wide, 17 in. Long.

Latigos—1½ in. Latigo Leather, to tie.

Stirrup Leathers—2½ in., Half Double.

Stirrups—No. 41L, 1½ in. Galvanized Steel Bound, Leathered.

Cinch—No. 161L, 18 Strand Hard Hair, Leather Ends.

Rig—Three Quarter or Center Fire.

For Extras and Changes, see Page 3711

ZENITH STOCK SADDLES

	Each
No. 560 —SQUARE SKIRTS; THREE QUARTER OR CENTER FIRE RIG	$56.00
No. 560R—ROUND SKIRTS; THREE QUARTER OR CENTER FIRE RIG	54.00

Weight About 27 Lbs. Each

Full Hand Block Stamped

Tree—Madras; Hide Covered, 12 in. Bulge Front
Horn—Steel, Latigo Leather Wrapped
Seat—Solid, with Seat, Jockeys and Cantle, One Piece; Bound and Sewed Cantle
Skirts—Square, 25 in. Long, Round, Close Cut, Wool Lined
Fenders—7 in. Wide, 17 in. Long
Latigos—1½ in. Latigo Leather, to tie.
Stirrup Leathers—2¾ in., Half Double, to lace.
Stirrups—No. 32 L, 1½ in. Galvanized Steel Bound, Leathered.
Cinch—No. 161L, 18 Strand Hard Hair, Leathered.
Rig—Three Quarter or Center Fire.

	Each
No. 550 —SQUARE SKIRTS; THREE QUARTER OR CENTER FIRE RIG	$55.00
No. 550R—ROUND SKIRTS; THREE QUARTER OR CENTER FIRE RIG	53.00

Weight About 26 Lbs. Each

Tree—Madras; 13½ or 14 in., Hide Covered; 12 in. Bulge Front.
Horn—Steel, Latigo Leather Wrapped.
Seat—Solid, with Seat, Jockeys and Cantle, One Piece; Bound and Sewed Cantle
Skirts—Square, 25 in. Long; Round, Close Cut, Wool Lined
Fenders—7 in. Wide, 17 in. Long
Latigos—1½ in. Latigo Leather, to tie
Stirrup Leathers—2¾ in., Half Double, to lace.
Stirrups—No. 41L, 1½ in. Galvanized Steel Bound, Leathered.
Cinch—No. 161L, 18 Strand Hard Hair, Leathered.
Rig—Three Quarter or Center Fire.

For Extras and Changes, see Page 3711.

ZENITH STOCK SADDLES

Each

No. 530R—ROUND SKIRTS; THREE QUARTER OR CENTER FIRE RIG $55.00

Weight About 25 Lbs. Each

Tree—Richardson; 13½ or 14 in., Hide Covered, 13 in. Bulge Front

Horn—Steel, Latigo Leather Wrapped.

Seat—Solid, with Seat, Jockeys and Cantle, One Piece; Bound Cantle.

Skirts—Round, Close Cut, Wool Lined.

Fenders—7½ in. Wide, 17 in. Long.

Latigos—1½ in. Latigo Leather, to tie.

Stirrup Leathers—2½ in., Half Double, to lace.

Stirrups—No. 32L, 1½ in. Galvanized Steel Bound, Leathered.

Cinch—No. 161L, 18 Strand Hard Hair, Leathered.

Rig—Three Quarter or Center Fire, Rawhide Lined and Laced.

No. 530 —SQUARE SKIRTS; THREE QUARTER OR CENTER FIRE RIG $50.00

No. 530R—ROUND SKIRTS; THREE QUARTER OR CENTER FIRE RIG 48.00

Weight About 25 Lbs. Each

Tree—Madras; Hide Covered; 13 in. Bulge Front.

Horn—Steel, Latigo Leather Braided.

Seat—Solid, with Seat, Jockeys and Cantle, One Piece; Bound and Sewed Cantle

Skirts—Square, 25 in. Long; Round, Close Cut, Wool Lined.

Fenders—7 in. Wide, 17 in. Long

Latigos—1½ in. Latigo Leather, to tie.

Stirrup Leathers—2½ in., Half Double, to lace.

Stirrups—No. 32L, 1½ in. Galvanized Steel Bound, Leathered.

Cinch—No. 398L, Fish Cord Hard Cotton, Leathered.

Rig—Three Quarter or Center Fire.

For Extras and Changes, see Page 3711

STOCK SADDLES

Each

No. 520 —SQUARE SKIRTS; THREE QUARTER OR CENTER FIRE RIG $44.00

No. 520R—ROUND SKIRTS; THREE QUARTER OR CENTER FIRE RIG 42.00

Weight About 22 Lbs. Each

Tree—Medford; Hide Covered, 11 in. Bulge Front.

Horn—Steel, Latigo Leather Wrapped.

Seat—Solid, with Seat, Jockeys and Cantle, One Piece; Bound and Sewed Cantle.

Skirts—Square, 24 in. Long; Round, Close Cut, Wool Lined.

Fenders—6½ in. Wide, 16 in. Long.

Latigos—1¼ in. Latigo Leather, to tie.

Stirrup Leathers—2⅛ in., Half Double, to lace.

Stirrups—No. 15 L, 1½ in. Ox Bow, Leathered.

Cinch—No. 421L, 6 in. Woven Hair, Leathered.

Rig—Three Quarter or Center Fire.

No. 500 —SQUARE SKIRTS; THREE QUARTER RIG..... $37.00

No. 500R—ROUND SKIRTS; THREE QUARTER RIG..... 35.00

Weight About 20 Lbs. Each

Tree—Golden West; Hide Covered Cantle; 10 in. Bulge Front.

Horn—Steel, Leather Covered.

Seat—Solid, with Seat, Jockeys and Cantle, One Piece; Bound and Sewed Cantle.

Skirts—Square, 24 in. Long; Round, Close Cut, Wool Lined.

Fenders—6½ in. Wide, 16 in. Long.

Latigos—1¼ in. Latigo Leather, to tie.

Stirrups—No. 15L, 1⅛ in. Ox Bow, Leathered.

Stirrups—No. 15, 1½ in. Ox Bow.

Cinch—No 421L, 6 in. Woven Hair, Leathered Ends.

Rig—Three Quarter.

POCKET KNIFE ASSORTMENTS

Displayed in Handsome Racked Cabinet With Glass Door

Cabinet Closed and Locked

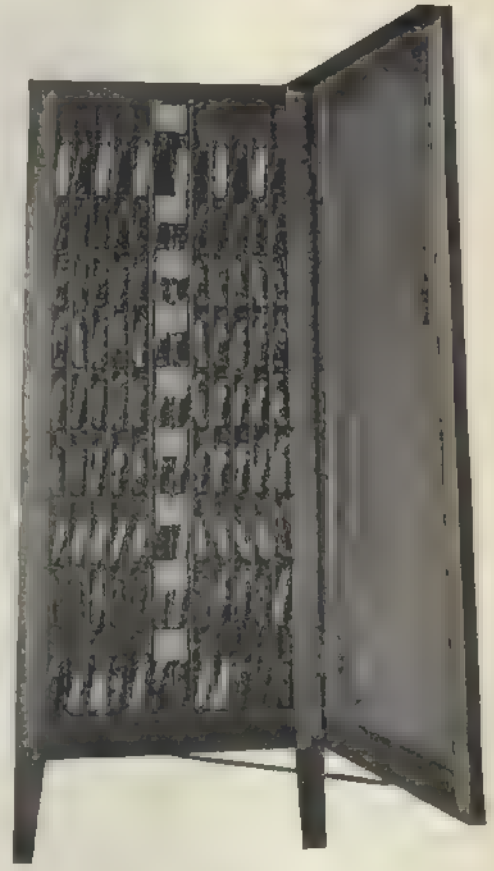
The best idea for displaying Pocket Knives we have ever seen.

Experience and careful records prove that where used the merchants' sales of Pocket Knives have been doubled.

The Case is strongly made and well finished. Heavy Glass Door shows Knives to advantage, yet prevents undue handling and protects from moisture and rust. Inside and Racks are White Enameled, the partitions extending right up flush with the Glass Door, eliminating any chance of the Knives becoming mixed.

We mark the Number and Retail Value on the Blade of each Knife with special cutlery ink, which does not stain the steel and can be easily removed

This Display Assortment has proved itself such a sales maker, that we are presenting free the Cabinet, valued at $10.00, with each White House Assortment as we know your increased sales will bring us repeat orders



Cabinet Open

WHITE HOUSE ASSORTMENT

Per Assortment

White House—Assortment Contains 168 Pocket Knives to Retail as per List below, Complete with Display Cabinet, 53 in. High, and 20½ in. Wide, with Glass Door and Lock..... $142.80

Weight 75 Lbs. per Assortment

	Total Retail Value
1 Dozen Pocket Knives to Retail at $0.25 Each	$ 3.00
1 Dozen Pocket Knives to Retail at .35 Each	4.20
2 Dozen Pocket Knives to Retail at .50 Each	12.00
2 Dozen Pocket Knives to Retail at .65 Each	15.60
2 Dozen Pocket Knives to Retail at .75 Each	18.00
2 Dozen Pocket Knives to Retail at 1.00 Each	24.00
2 Dozen Pocket Knives to Retail at 1.25 Each	30.00
2 Dozen Pocket Knives to Retail at 1.50 Each	36.00
Handsome Display Cabinet, an Efficient Silent Salesman, value $10.00	Free
Total, 14 Dozen Assorted Best Sellers, Total Retail Value	$142.80

POCKET KNIFE ASSORTMENTS

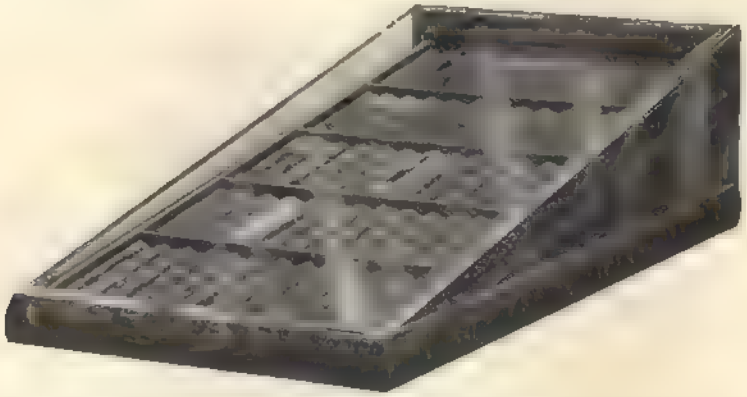
HARTFORD UTILITY

This Rack displays the Knives in a manner which creates a desire for possession; the entire Knife, including the Blade is seen at a glance. the Rack is nicely Finished and in addition to its general usefulness is an ornament as well; it is intended for an Inside or Window Display; is cork lined where the point of the Knife runs into the Rack, so will not injure the Blade

No. 100—Assortment contains 168 Pocket Knives to retail as per list below, Complete with Display Cabinet 42½ in. High and 32 in. Wide ..... Per Assortment $102.00

	Total Retail Value
2 Dozen Hartford Pocket Knives to Retail at $0.25 Each	$ 6.00
6 Dozen Hartford Pocket Knives to Retail at .50 Each	36.00
4 Dozen Hartford Pocket Knives to Retail at 75 Each	36 00
2 Dozen Hartford Pocket Knives to Retail at 1 00 Each	24 00
Total Retail Value	$102.00

HARTFORD POCKET KNIFE ASSORTMENTS



With this Assortment we furnish One Only **New Style Plate Glass Top Show Case; Top Plate Glass Measures** 11 in. in Width, 22 in. in Length.

Case is made 1¾ in High at the Front and 6½ in High at Back, with Drawer to hold Surplus Stock. **Back Door Locks. Has Inside Removable Tray, Green Plush Lined, with partition for 60 Knives.**

This is one of the most attractive Display Cases we have ever seen. Displays the Knives on a slant and Tray is so arranged that each Knife is held up to the glass.

If requested, we will be glad to mark on the blade of each knife the number and retail prices. If dealer can furnish us with his cost mark we will also mark his cost on each knife. This will overcome any chances of the knives getting mixed.

This Assortment consists of Forty Numbers—10½ Dozen in all.

Dealers' cost on complete assortment is $65 50; his total retail selling value is $125.95

Retail prices we have marked on these Knives is a fair one.

We have tried to make up an Assortment of Knives that will prove ready sellers of the most staple patterns in our Hartford line of Pocket Knives

Every Knife is Unconditionally Guaranteed.

Even if the dealer already has a stock of Pocket Knives on hand, by putting this Assortment on Display, he will find his knife business will increase materially.

No. 100—HARTFORD POCKET KNIFE ASSORTMENT

With Plate Glass Display Case

Amount	No.	Cost Per Dozen	Total Cost	Retail Each	Tot. Retail Price
¼ Doz.	5101S	$2 00	$0.50	$0 25	$0.75
¼ Doz.	5100R	3.00	50	.25	.75
¼ Doz.	5201E	3.35	.84	.50	1.50
¼ Doz.	5206S	3.35	84	.50	1.50
⅓ Doz.	5302R	4.00	1 00	.50	1.50
½ Doz.	5300BC	4.00	2.00	.50	3 00
¾ Doz.	5303S	4.00	3.00	.50	3.00
¼ Doz.	5306RB	4 00	1 00	.50	1.50
¼ Doz.	5318S	4.00	1 00	.50	1.50
¼ Doz.	7416C	4.50	1 13	.60	1.80
¼ Doz.	7606PI	6.75	1.69	1.00	3.00
¼ Doz.	7614PI	7 00	1.75	1.00	3.00
¼ Doz.	5408RB	4 50	1.12	.65	1.95
¼ Doz.	5406B	4.50	1.12	.65	1 95
¼ Doz.	5414S	4 50	1.12	.65	1.95
¼ Doz.	5421S	4 50	1.12	.65	1.95
¼ Doz.	5453S	4.50	1 12	.65	1.95
¼ Doz.	5808CC	6.00	1.50	.75	2 25
¼ Doz.	7604B	6 75	1.69	1 00	3 00
¼ Doz.	5610BC	5 50	1 38	.90	2.70

Amount	No.	Cost Per Dozen	Total Cost	Retail Each	Tot. Retail Price
⅓ Doz.	5705S	$6 75	$1 69	$1 00	$3 00
¼ Doz.	5721BC	6.75	1.69	1.00	3.00
¼ Doz.	5729C	6.75	1.69	1.00	3 00
¼ Doz.	5724S	6.75	1.69	1.00	3.00
⅓ Doz.	5800BC	8.00	4.00	1.25	7.50
¾ Doz.	9402P	6 00	1.50	1 00	3 00
⅓ Doz.	9400P	5.00	1.25	75	2 25
¼ Doz.	7426GM	6.00	1.50	1.00	3 00
⅓ Doz.	9708P	9.00	2 25	1 25	3 75
⅓ Doz.	5061S	9.00	2 25	1 25	3 75
¼ Doz.	5803Buff	8 00	2.00	1 25	3 75
¼ Doz.	5807BC	8.00	2.00	1 25	3 75
¼ Doz.	5825RB	8.00	2.00	1 25	3 75
⅓ Doz.	9706P	9 00	2.25	1 25	3 75
¾ Doz.	9712P	9 00	2.25	1 25	3 75
¼ Doz.	9806P	10.00	2.50	1 25	3.75
¼ Doz.	9705P	9.00	2.25	1 25	3.75
⅓ Doz.	7404GP	4.50	1.12	65	1 95
⅓ Doz.	9726P	10 80	2.70	1 50	4.50

	Total Cost	Total Retail Value
10½ Doz Total	$65 50	$112.95
1 Only, Plate Glass Top Show Case		No Charge

ZENITH PUNCH KNIFE ASSORTMENTS

ZENITH

Per Assortment

No. 102—Assortment Contains 6 Dozen Zenith Punch Knives as described below; A Handsome Case for Displaying a Sample of Each Knife is given Free with each assortment; This Case is 17 in. Wide, 15½ in. High and 1¾ in. Deep; Lined with Green Plush Heavy Plate Glass Top, A White Celluloid Button at Side of Each Knife gives the Number and Retail Price . . . . . [redacted] $93 90

Weight 8 Lbs. per Assortment

CONTENTS OF NO. 102 ASSORTMENT

One-Half Dozen of Each Knife Listed Below

Retail Price, Each

No. 30R—Red Handle; Two Blades and a Leather Punch, Brass Lining and Rivets; German Silver Bolsters and Shield . . . [redacted] $1 75

No. 3020S—Stag Handle; Two Blades and Leather Punch; Brass Lining, German Silver Bolsters and Shield, Large Sabre Clip, Spey and Punch Blade . . . . . [redacted] 1.75

No. 310S—Stag Handle; Two Blades and a Leather Punch; Brass Lining and Rivets; Milled Back; German Silver Bolsters and Shield . . . . . [redacted] 1 75

No. 3002S—Stag Handle; Two Blades and a Leather Punch; Brass Lining; German Silver Bolsters and Shield; Milled Back . . . . . [redacted] 2.00

Retail Price, Each

No. 32S—Stag Handle, Two Blades and a Leather Punch; Brass Lining and Rivets German Silver Bolsters and Shield . . . . . [redacted] 1 75

No. 32C—Cocobolo Handle; Otherwise same as above . . . . . [redacted] 1.50

No 2072R—Rosewood Handle; One Blade and Leather Punch, Steel Lined, Brass Rivets, Steel Bolster; German Silver Shield . . . . . [redacted] .75

No. 2074R—Rosewood Handle; One Blade and Leather Punch; Brass Rivets, Steel Lining and Bolsters; German Silver Shield . . . . . [redacted] .90

No. 3007S—Stag Handle; Two Blades and Leather Punch; Brass Lining, German Silver Bolsters and Shield, Milled Back . . . . . [redacted] 1.75

No. 3013R—Red Handle; Two Blades and Leather Punch; Brass Lining; German Silver Bolsters and Shield . . . . . [redacted] 1.75

ZENITH POCKET KNIVES

OF QUALITY

Pocket Knives and Cutlery Bearing the Zenith Trade Mark are American-made and as near Perfection as Science, Skilled Labor and Over Half Century of Practical Experience can Produce. They are Hand Forged, Hardened and Tempered; Made from S. & C. Wardlow's Extra Refined Cutlery Steel; Each Knife is carefully Hand Honed.

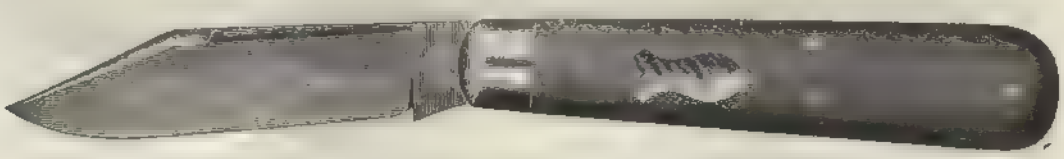
Unconditionally Guaranteed

(Full Size Cuts)

No. 132C—Cocobolo Handle; One Blade, Steel Lining, Bolster and Rivets . . . . . List Per Dozen $2 50 — Retail Value Each $0 20

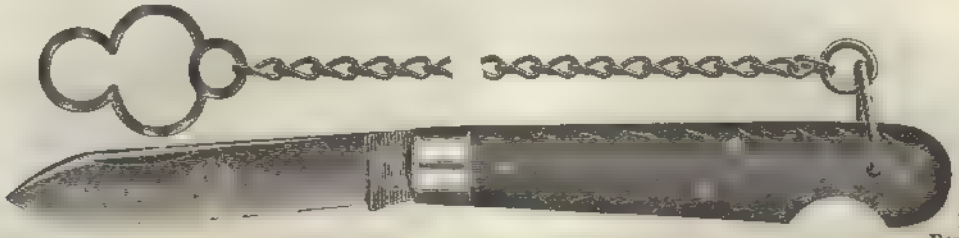
No. 10R—Rosewood Handle; One Blade; Steel Lining, Bolster and Rivets . . . . . List Per Dozen $3 50 — Retail Value Each $0 20
Weight 1¼ Lbs. per Dozen

No. 14R—Rosewood Handle; One Sabre Blade; Steel Lining and Rivets; Grooved Steel Bolster. . . . . List Per Dozen $4.50 — Retail Value Each $0.35
Weight 1½ Lbs. per Dozen



No. 18R—Rosewood Handle; One Blade; Steel Lining Rivets and Bolster, with German Silver Shield . . . . . List Per Dozen $4.00 — Retail Value Each $0.25
Weight 1½ Lbs. per Dozen

No. 16R—Rosewood Handle; One Blade, Steel Lining, Rivets and Bolster with German Silver Shield. . . . . List Per Dozen $4.00 — Retail Value Each $0 25
Weight 1½ Lbs. per Dozen



No. 12R—Rosewood Handle; One Blade; Brass Lining and Rivets, German Silver Bolster; Easy Opener, Length of Chain 23 In. . . . . List Per Dozen $4 50 — Retail Value [illegible] $0.35
Weight 2 Lbs. per Dozen

All Above, Half Dozen in a Box

ZENITH POCKET KNIVES

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Unconditionally Guaranteed

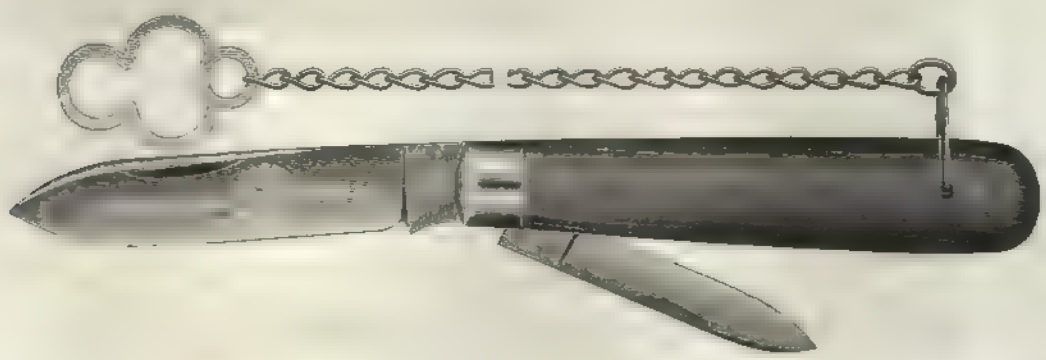
(Full Size Cuts)

	List Per Dozen	Retail Value Each
No. 20R—Rosewood Handle; Two Blades, Steel Lining, Bolster and Rivets, Large Blade 2⅛ in. Long, Length when Open 3¾ in.	$4.00	$0.35
No. 22E—Ebony Handle; Otherwise same as No. 22R	4.00	.35
No. 22S—Stag Handle; Otherwise same as No. 22R	4.50	.35

Weight ¾ Lb. per Dozen

	List Per Dozen	Retail Value Each
No. 24S—Stag Handle; Two Blades; Steel Lining, Bolster and Rivets	$4.50	$0.35
No. 24R—Rosewood Handle; Otherwise same as Above	4.00	.25

Weight ¾ Lb. per Dozen



	List Per Dozen	Retail Value Each
No. 26R—Rosewood Handle; Two Blades; Steel Lining, Bolster and Rivets; Length of Chain 23 in	$4.50	$0.35

Weight 2⅛ Lbs. per Dozen

All Above, Half Dozen in a Box

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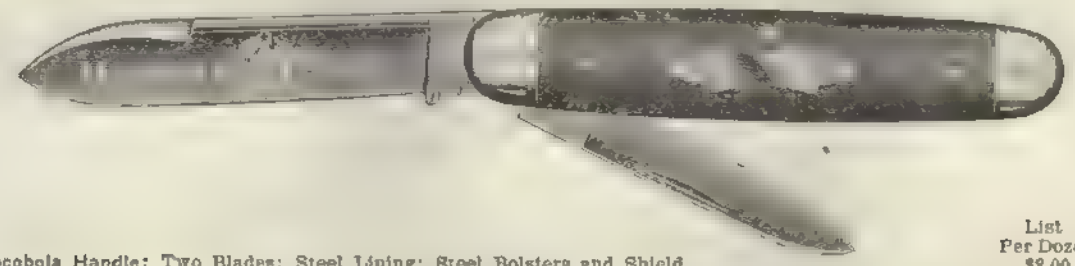
Unconditionally Guaranteed
(Full Size Cuts)



	List Per Dozen	Retail Value Each
No. 2142C—Cocobola Handle; Two Blades; Steel Lining; Steel Bolsters and Shield	$8 00	$0.50

Weight 2 Lbs. per Dozen

	List Per Dozen	Retail Value Each
No. 2144E—Ebony Handle; Two Blades; Brass Lining; Steel Bolster, German Silver Shield	$8.00	$0.50

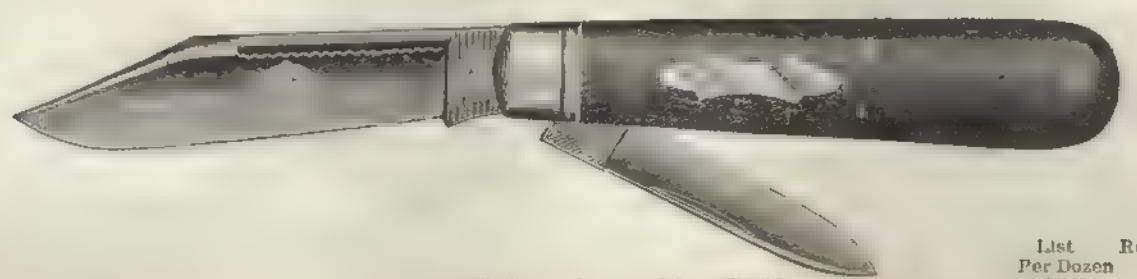
Weight 2 Lbs. per Dozen

	List Per Dozen	Retail Value Each
No. 2144S—Stag Handle; Two Blades; Brass Lining; Steel Bolster; German Silver Shield	$8 00	$0.50

Weight 2 Lbs per Dozen

	List Per Dozen	Retail Value Each
No. 2146S—Stag Handle; Two Blades Brass Lining, Steel Bolster; German Silver Shield . ..	$8 00	$0.50

Weight 2 Lbs per Dozen



	List Per Dozen	Retail Value Each
No. 2146E—Ebony Handle; Two Blades. Brass Lining. Steel Bolster German Silver Shield	$8 00	$0.50

Weight 2 Lbs per Dozen

All Above, Half Dozen in a Box

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Unconditionally Guaranteed

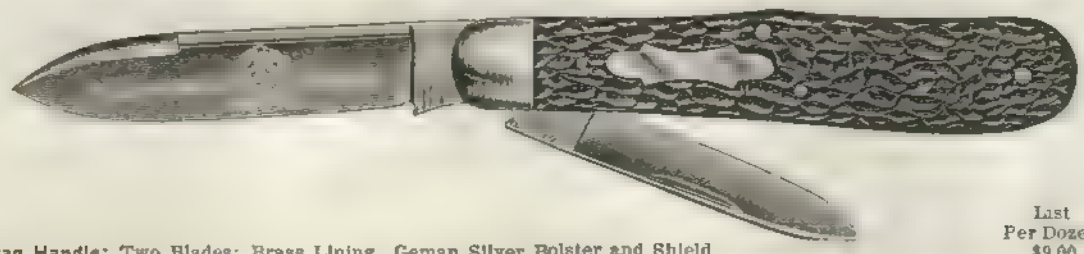
(Full Size Cuts)

	List Per Dozen	Retail Value Each
No. 2132C—Cocobola Handle; Two Blades; Brass Lining; German Silver Bolster and Shield	$9.00	$0.60

Weight 2 Lbs. per Dozen

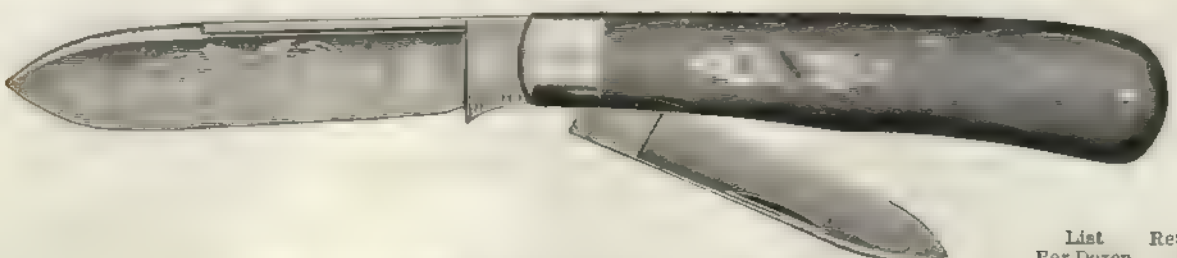
	List Per Dozen	Retail Value Each
No. 2116E—Ebony Handle; Two Blades; Brass Lining, German Silver Bolster and Shield	$9.00	$0.60

Weight 2 Lbs. per Dozen



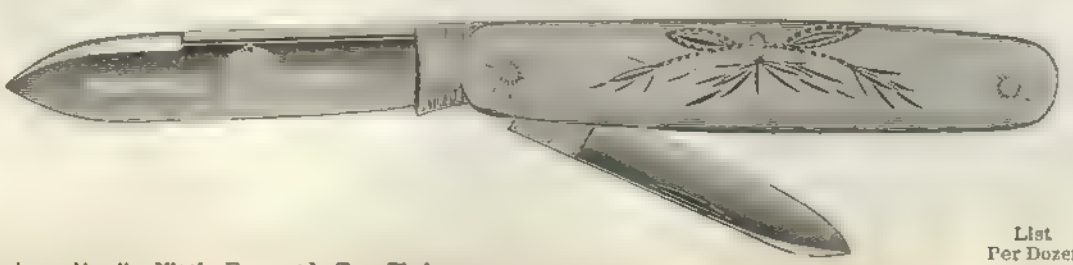
	List Per Dozen	Retail Value Each
No. 2116S—Stag Handle; Two Blades; Brass Lining, Geman Silver Bolster and Shield	$9.00	$0.60

Weight 2 Lbs. per Dozen



	List Per Dozen	Retail Value Each
No. 2138R—Rosewood Handle; Two Blades, Brass Lining, German Silver Bolster and Shield	$9.00	$0.60

Weight 2 Lbs. per Dozen



	List Per Dozen	Retail Value Each
No. 2140A—Aluminum Handle, Nicely Engraved; Two Blades	$12.00	$0.75

Weight 1 Lb. per Dozen

All Above, Half Dozen in a Box

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Unconditionally Guaranteed

(Full Size Cuts)

	List Per Dozen	Retail Value Each
No. 2120C—Cocobola Handle, Two Blades, Brass Lining, German Silver Bolster and Shield . Weight 2 Lbs. per Dozen	$3 00	$0 50

	List Per Dozen	Retail Value Each
No. 2118E—Ebony Handle; Two Blades; Brass Lining; German Silver Bolster and Shield ..... Weight 2 Lbs. per Dozen	$3 00	$0.50

	List Per Dozen	Retail Value Each
No. 2118S—Stag Handle; Two Blades; Brass Lining; German Silver Bolster and Shield ..... Weight 2 Lbs. per Dozen	$3 00	$0 50

	List Per Dozen	Retail Value Each
No. 2126E—Ebony Handle; Two Blades, Brass Lining, German Silver Bolster and Shield . ..... Weight 2 Lbs. per Dozen	$12 00	$1.00
No. 2126S—Stag Handle; Otherwise same as above.....	12.00	$1.00

All Above, Half Dozen in a Box

ZENITH POCKET KNIVES

OF QUALITY

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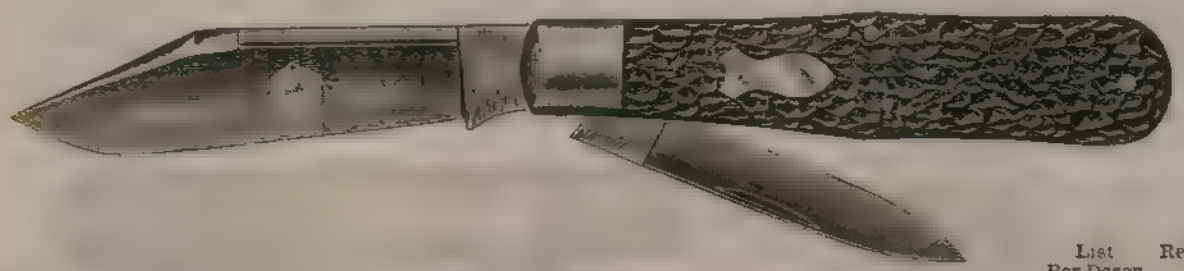
Unconditionally Guaranteed
(Full Size Cuts)

	List Per Dozen	Retail Value Each
No. 2124E—Ebony Handle; Two Blades, Brass Lining, German Silver Bolster and Shield	$9.00	$0.50

Weight 2 Lbs. per Dozen

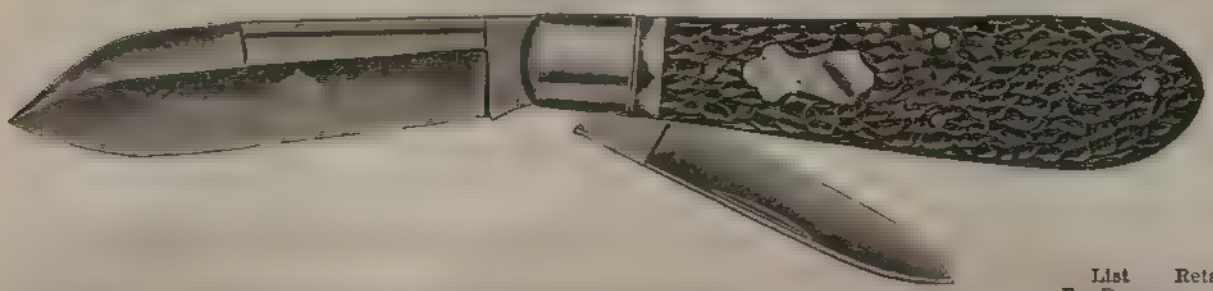


	List Per Dozen	Retail Value Each
No. 2124S—Stag Handle; Two Blades Brass Lining; German Silver Bolster and Shield	$9.00	$0.60

Weight 2 Lbs. per Dozen

	List Per Dozen	Retail Value Each
No. 2148E—Ebony Handle; Two Blades; Brass Lining; German Silver Bolster and Shield	$15.00	$1.25

Weight 2 Lbs. per Dozen



	List Per Dozen	Retail Value Each
No. 2148S—Stag Handle; Two Blades; Brass Lining; German Silver Bolster and Shield	$16.00	$1.50

Weight 2 Lbs per Dozen

	List Per Dozen	Retail Value Each
No. 2068S—Stag Handle; Two Blades; Brass Lining; German Silver Bolsters; No Shield	$12.00	$1.00

All Above, Half Dozen in a Box

ZENITH POCKET KNIVES

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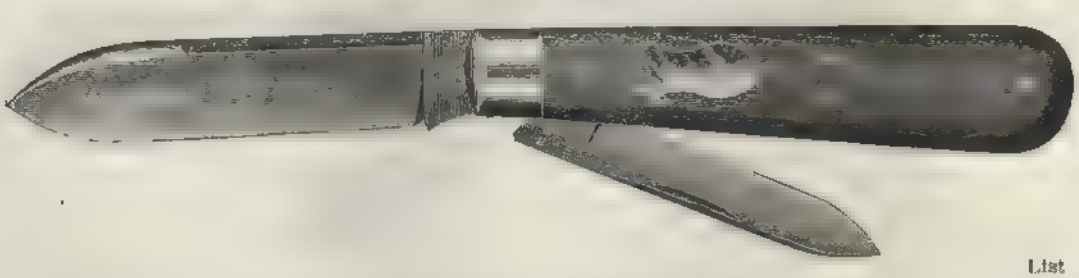
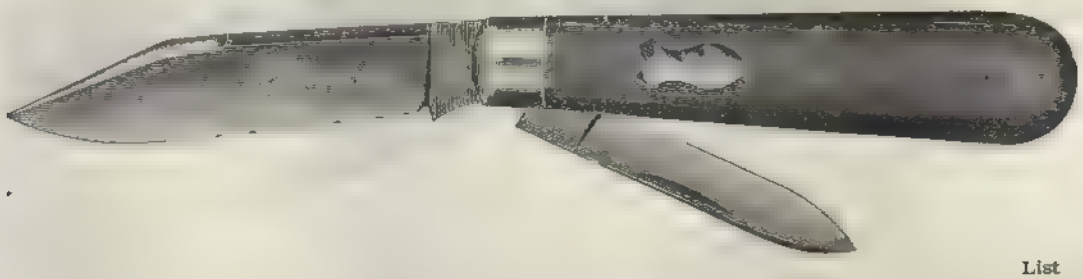
Unconditionally Guaranteed

(Full Size Cuts)



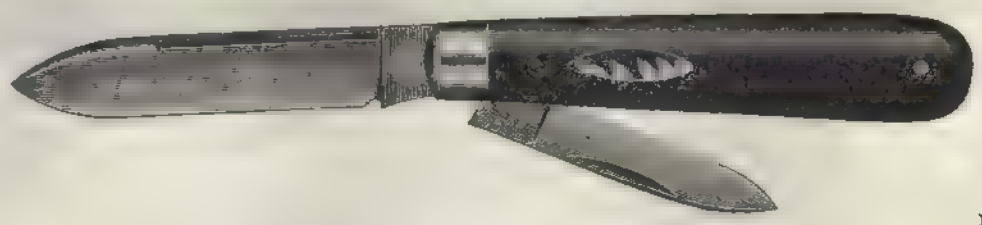
	List Per Dozen	Retail Value Each
No. 28R—Rosewood Handle; Two Blades, Steel Lining, Rivets and Bolster, German Silver Shield	$7.50	$0.50
No. 28E—Ebony Handle; Otherwise same as Above	7.50	.50
No. 28S—Stag Handle; Otherwise same as Above	8.00	.65

Weight 2 Lbs. per Dozen



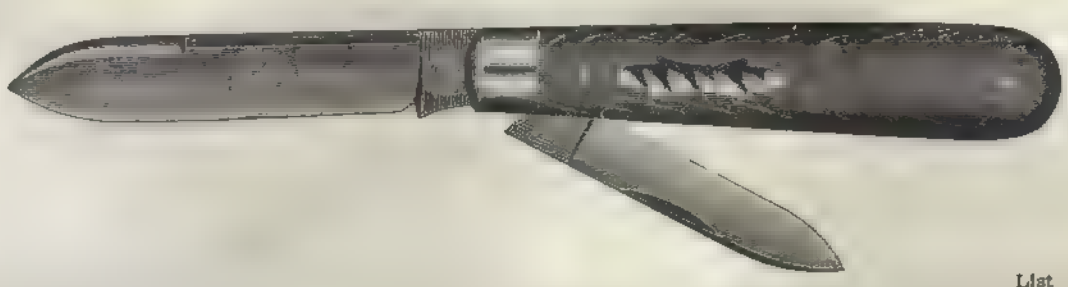
	List Per Dozen	Retail Value Each
No. 202E—Ebony Handle; Two Blades, Steel Lining, Rivets and Bolster, German Silver Shield	$7.50	$0.50
No. 202R—Rosewood Handle; Otherwise same as Above	7.50	.50
No. 202S—Stag Handle; Otherwise same as Above	8.00	.65

Weight 2 Lbs. per Dozen



	List Per Dozen	Retail Value Each
No. 204E—Ebony Handle; Two Blades; Brass Lining and Rivets, German Silver Bolster and Shield	$8.00	$0.60

Weight 1¼ Lbs. per Dozen



	List Per Dozen	Retail Value Each
No. 206C—Cocobolo Handle; Two Blades Brass Lining and Rivets; German Silver Bolster and Shield	$8.00	$0.65
No. 206S—Select White Bone Handle; Otherwise same as Above	9.00	.75

Weight 1⅓ Lbs. per Dozen

All Above, Half Dozen in a Box

ZENITH POCKET KNIVES

OF QUALITY

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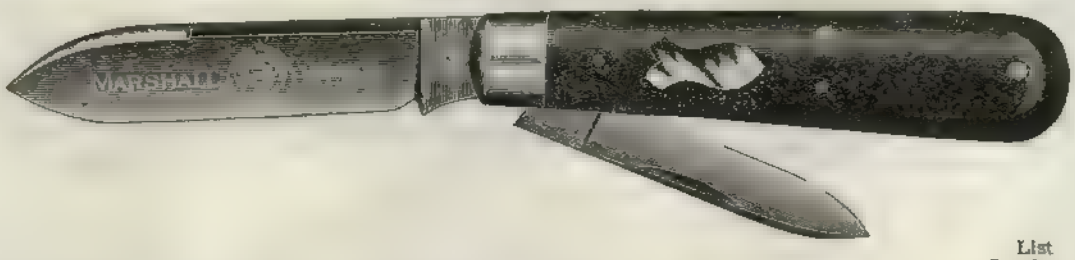
Unconditionally Guaranteed

(Full Size Cuts)

	List Per Dozen	Retail Value Each
No. 208E—Ebony Handle; Two Blades; Brass Lining and Rivets; German Silver Bolster and Shield	$8.00	$0.59
No. 208S—Stag Handle; Otherwise same as Above	9.00	.65

Weight 1¾ Lbs. per Dozen



	List Per Dozen	Retail Value Each
No. 210E—Ebony Handle; Two Blades; Brass Lining and Rivets; German Silver Bolster and Shield	$8.00	$0.59
No. 212E—Ebony Handle; Clip Blade; Otherwise same as above	8.00	.59

Weight 1¾ Lbs. per Dozen

	List Per Dozen	Retail Value Each
No. 214E—Ebony Handle; Two Blades; Large Blade, Sabre Pattern, Brass Lining and Rivets, German Silver Bolster and Shield	$8.00	$0.65
No. 214R—Rosewood Handle; Otherwise same as Above	8.00	.65
No. 214S—Stag Handle; Otherwise same as Above	9.00	.75

Weight 2 Lbs. per Dozen

	List Per Dozen	Retail Value Each
No. 216E—Ebony Handle; Two Blades; Large Blade, Sabre Pattern, Brass Lining and Rivets; German Silver Bolster and Shield	$8.00	$0.65
No. 216R—Rosewood Handle; Otherwise same as Above	8.00	.65
No. 216S—Stag Handle; Otherwise same as above	9.00	.75

Weight 2 Lbs. per Dozen

All Above, Half Dozen in a Box

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Unconditionally Guaranteed

(Full Size Cuts)

	List Per Dozen	Retail Value Each
No. 218E—Ebony Handle; Two Blades; Brass Lining and Rivets; German Silver Bolster and Shield	$8.00	$0 65

Weight ¾ Lb. per Dozen

	List Per Dozen	Retail Value Each
No. 220S—Stag Handle; Two Blades, Brass Lining and Rivets, German Silver Bolster and Shield	$4 00	$0 75
No. 220E—Ebony Handle; Otherwise same as above	9.00	.75
No. 2194R—Rosewood Handle; Two Blades, Brass Lining, Steel Bolster and Shield; 8 Gauge Extra Heavy Blade, Glazed	8 00	.60

Weight ¾ Lb. per Dozen

	List Per Dozen	Retail Value Each
No. 222E—Ebony Handle; Two Blades; Brass Lining and Rivets; German Silver Bolster and Shield	$ 9.00	$0.75
No. 222B—Extra Select Bone Handle; Otherwise same as above	12.00	1.00

Weight 1 Lb. per Dozen

	List Per Dozen	Retail Value Each
No. 2186S—Stag Handle; Two Blades, Brass Lining; German Silver Bolsters and Shield	$9.00	$0 65

Weight 1½ Lbs. per Dozen

All Above, Half Dozen in a Box

ZENITH POCKET KNIVES

OF QUALITY

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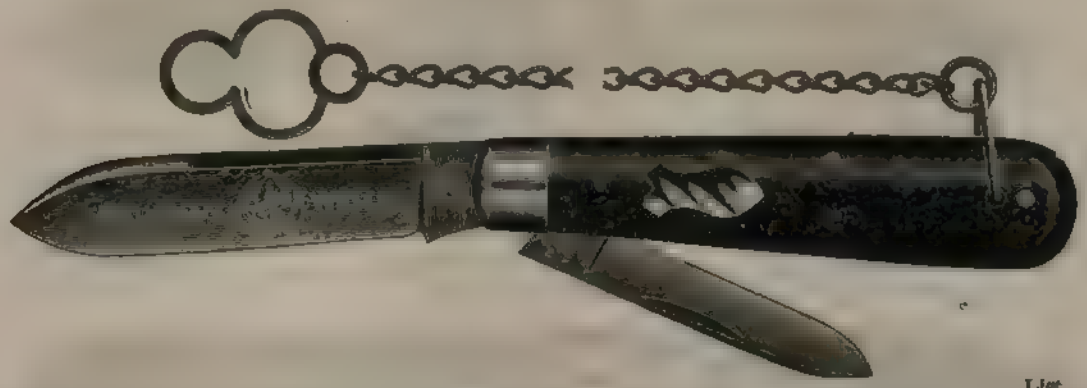
Unconditionally Guaranteed

(Full Size Cuts)



	List Per Dozen	Retail Value Each
No. 240E—Ebony Handle; Two Blades; Brass Lining and Rivets; German Silver Bolster and Shield; Length of Chain 22 in.	$3.00	$0.50

Weight 2¼ Lbs. per Dozen

	List Per Dozen	Retail Value Each
No. 224C—Cocobolo Handle; Two Blades; Extra Heavy Gauge Large Blade and Spring; Brass Lining; Extra Heavy German Silver Bolster and Shield	$12.00	$1.00

Weight 2¼ Lbs. per Dozen

	List Per Dozen	Retail Value Each
No. 256H—Select Horn Handle; Two Extra Heavy Blades; Brass Lining and Rivets; German Silver Bolster and Shield	$15.00	$1.25
No. 256S—Stag Handle; Otherwise same as above	15.00	1.25
No. 226E—Ebony Handle; Same as 256 except Heavier Gauge Blades and Springs	12.00	1.00

Weight 2¾ Lbs. per Dozen

All Above, Half Dozen in a Box

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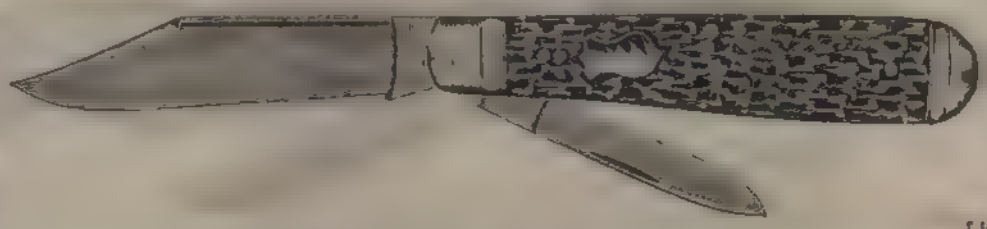
Unconditionally Guaranteed

(Full Size Cuts)

	List Per Dozen	Retail Value Each
No. 2100DS—Deer Shell Handle; Two Blades; Brass Lining, German Silver Rivets and Bolsters	$16.00	$1.75
No. 2100S —Stag Handle, with Shield, Otherwise same as above	10.00	85
No. 2100E —Ebony Handle; Otherwise same as No. 2100S	9.00	75
No. 2100P —Pearl Handle, No. Shield, Otherwise same as No. 2100E	18.00	1.50

	List Per Dozen	Retail Value Each
No. 2102PS—Pearl Shell Handle; Two Blades; Brass Lining, German Silver Bolsters	$10.00	$0.85
No. 2102S —Stag Handle, Otherwise same as above	10.00	.85
No. 2102E —Ebony Handle, Otherwise same as above	9.00	.75

	List Per Dozen	Retail Value Each
No. 2098C—Cocobolo Handle; Two Blades, Brass Lining, German Silver Bolsters and Shield	$ 9.00	$0.75
No. 2098S—Stag Handle, Otherwise same as above	10.00	.75



	List Per Dozen	Retail Value Each
No. 2184S—Stag Handle; Two Blades; Brass Lining; German Silver Bolsters and Shield	$8.00	$0.50

	List Per Dozen	Retail Value Each
No. 2156MS—Marble Shell Handle, Two Blades, Brass Lining, German Silver Bolster and Shield	$8.00	$0.50
No. 2156TS—Tortoise Shell Handle Two Blades, Brass Lining German Silver Bolster and Shield	8.00	.50
No. 2156ZS—Zebra Shell Handle; Two Blades, Brass Lining, German Silver Bolster and Shield	8.00	.60

All Above, Half Dozen in a Box; Average Weight 2 Lbs. per Dozen

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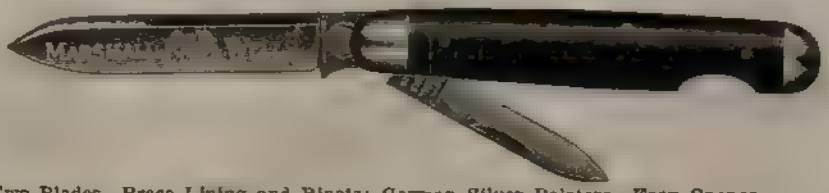
Unconditionally Guaranteed

(Full Size Cuts)

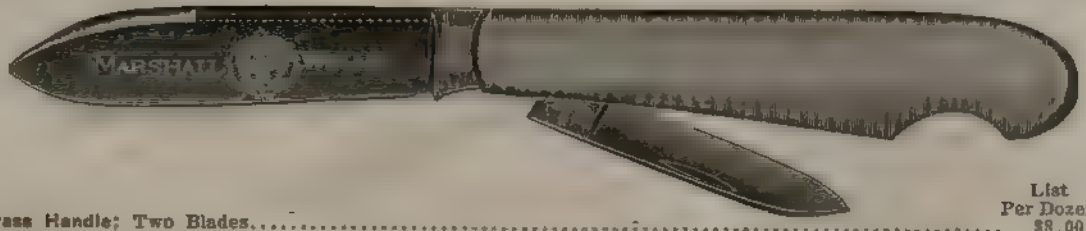


	List Per Dozen	Retail Value Each
No. 298H—Horn Handle; Two Blades, Brass Lining and Rivets; German Silver Bolsters, Easy Opener	$ 9.00	$0 75
No. 298P—Pear Handle; Otherwise same as above	15.00	1.25
No. 298S—Stag Handle; German Silver Shield; Otherwise same as above	9.00	.75

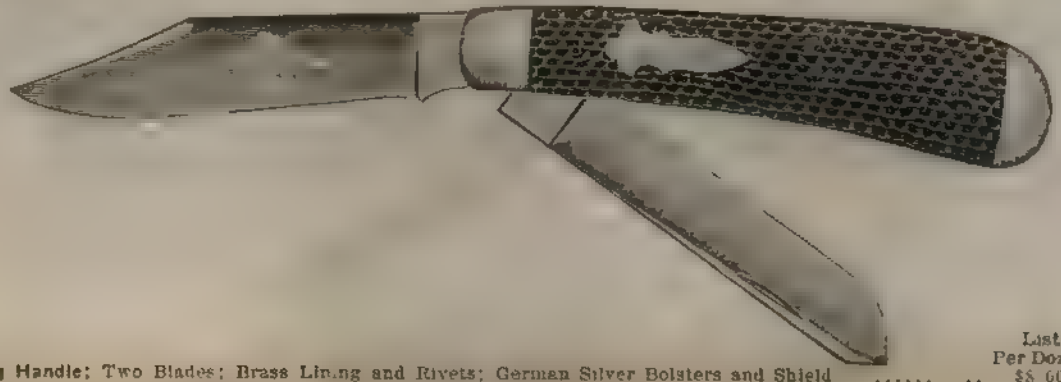
Weight ¾ Lb. per Dozen

	List Per Dozen	Retail Value Each
No. 230S—Stag Handle; Two Blades; Brass Lining and Rivets; German Silver Bolster and Shield; Easy Opener	$9.00	$0.75
No. 230E—Ebony Handle; Otherwise same as above	8.00	.65

	List Per Dozen	Retail Value Each
No. 266E—Ebony Handle; Two Blades; Brass Lining and Rivets; German Silver Bolsters and Shield; Easy Opener	$12 00	$0.75
No. 266S—Stag Handle; Otherwise same as above	12.00	1.00



	List Per Dozen	Retail Value Each
No. 2106M—Brass Handle; Two Blades	$8.00	$0.65



	List Per Dozen	Retail Value Each
No. 2196S—Stag Handle; Two Blades; Brass Lining and Rivets; German Silver Bolsters and Shield	$8 00	$0.69

All Above, Half Dozen in a Box. Average Weight 2 Lbs. per Dozen

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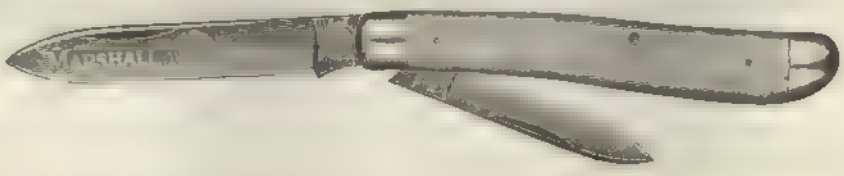
Unconditionally Guaranteed

(Full Size Cuts)



	List Per Dozen	Retail Value Each
No. 2066P—Pearl Handle; Two Blades; Brass Lining, German Silver Rivets and Bolsters	$16.80	$1.25

Weight ¾ Lb. per Dozen

	List Per Dozen	Retail Value Each
No. 2070P—Pearl Handle; Two Blades, Brass Lining and Rivets, German Silver Tips	$21.60	$1.50

Weight ¾ Lb. per Dozen

	List Per Dozen	Retail Value Each
No. 2000H—Horn Handle; Two Blades Brass Lining and Rivets, German Silver Bolsters	$9.00	$0.75
No. 2000S—Stag Handle; German Silver Shield, Otherwise same as above	9.00	.75
No. 2000PS—Smoked Pearl Handle; Otherwise same as above	9.00	.75

Weight ¾ Lb. per Dozen

	List Per Dozen	Retail Value Each
No. 2052S—Stag Handle; Two Blades, Brass Lining and Rivets; German Silver Bolsters and Shield	$ 9.00	$0.65
No. 2052E—Ebony Handle; Otherwise same as above	9.00	.65
No. 2052P—Pearl Handle; No Shield; Otherwise same as above	24.00	1.75

Weight 1¼ Lbs. per Dozen

	List Per Dozen	Retail Value Each
No. 2068P—Pearl Handle; Two Blades, Brass Lining, German Silver Rivets, Bolsters and Shield	$24.00	$1.75

Weight 1¼ Lbs. per Dozen

All Above, Half Dozen in a Box

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Unconditionally Guaranteed

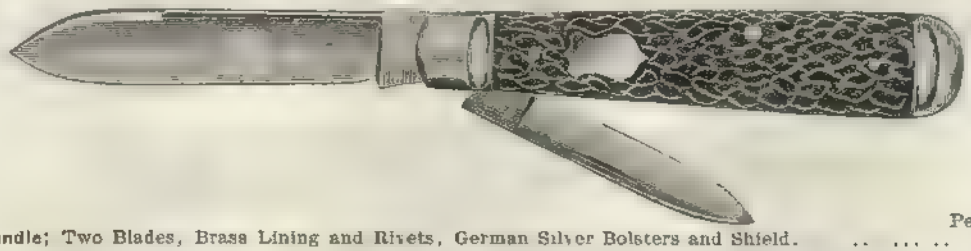
(Full Size Cuts)

	List Per Dozen	Retail Value Each
No. 2054S—Stag Handle; Two Blades, Brass Lining and Rivets, German Silver Bolsters and Shield	$10.00	$0.75
No. 2054AS—Amber Shell Handle; No Shield; Otherwise same as above	10.00	.75

Weight 1¼ Lbs. per Dozen

	List Per Dozen	Retail Value Each
No. 228E—Ebony Handle; Two Blades; Brass Lining and Rivets, German Silver Bolsters and Shield	$8.00	$0.65
No. 228S—Stag Handle; Otherwise same as above	9.00	.65

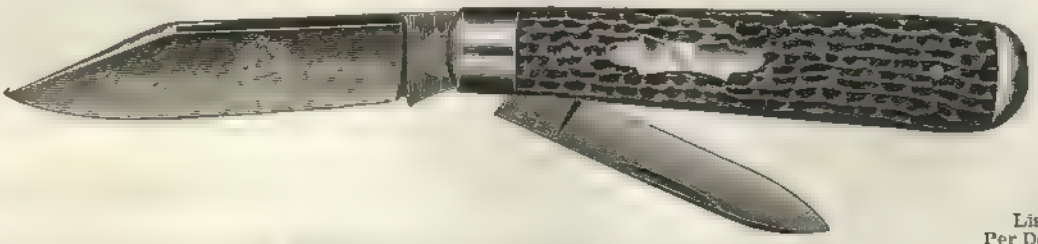
Weight 1⅛ Lbs per Dozen



	List Per Dozen	Retail Value Each
No. 2182S—Stag Handle; Two Blades, Brass Lining and Rivets, German Silver Bolsters and Shield.	$8.00	$0.50

	List Per Dozen	Retail Value Each
No. 232C—Cocobolo Handle; Two Blades, Brass Lining and Rivets; German Silver Bolsters and Shield	$8.00	$0.65
No. 232S—Stag Handle; Otherwise same as above	8.00	.65
No. 232B—Selected Bone Handle; Otherwise same as above	10.00	.75
No. 232P—Pearl Handle; No Shield; German Silver Rivets; Otherwise same as above	27.00	2.00
No. 2134C—Cocobolo Handle; Two Blades; Steel Lining and Rivets; Steel Bolsters and Shield	8.00	50
No. 2134S—Stag Handle; Otherwise same as No. 2134C	8.00	.50

Weight 2 Lbs per Dozen



	List Per Dozen	Retail Value Each
No. 234S—Stag Handle; Two Blades; Brass Lining and Rivets; German Silver Bolsters and Shield	$ 9.00	$0.65
No. 234E—Ebony Handle; Otherwise same as above	8.00	.65

Weight 2 Lbs. per Dozen

No. 2136C—Cocobolo Handle; Two Blades; Steel Lining; Steel Bolsters and Shield	8.00	.50
No. 2136S—Stag Handle; Otherwise same as No. 2136C	8.00	50

All Above, Half Dozen in a Box

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Unconditionally Guaranteed

(Full Size Cuts)

	List Per Dozen	Retail Value Each
No. 236C—Cocobolo Handle; Two Blades, Brass Lining and Rivets; German Silver Bolsters and Shield	$9 00	$0.65
No. 236S—Stag Handle; Otherwise same as above	9.00	.65
SPEAR POINT		
No. 238E—Ebony Handle; Spear Point; Otherwise same as above	9.00	.65
No. 238S—Stag Handle; Spear Point; Otherwise same as above	9.00	.65

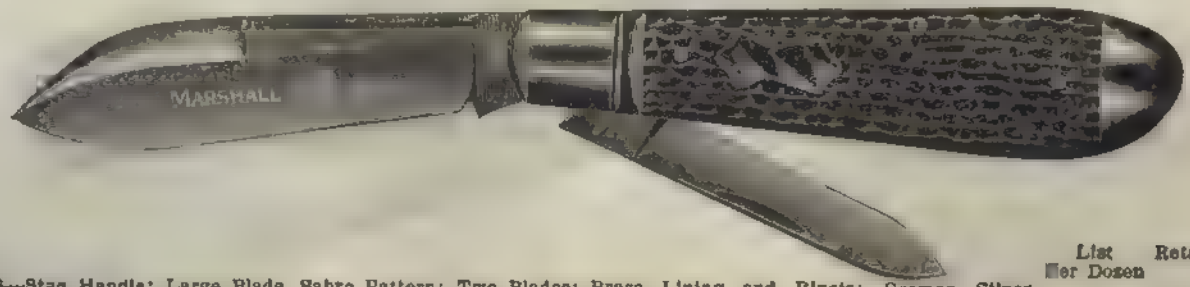
Weight 2 Lbs. per Dozen

	List Per Dozen	Retail Value Each
No. 268C—Cocobolo Handle; Two Blades; Brass Lining and Rivets, German Silver Bolsters and Shield	$9 00	$0.65
No. 268S—Stag Handle, Otherwise same as above	12 00	1.00

Weight 2 Lbs per Dozen

	List Per Dozen	Retail Value
No. 270C—Cocobolo Handle; Two Blades; Brass Lining and Rivets; German Silver Bolsters and Shield	$11.00	$0.75
No. 270S—Stag Handle; Otherwise same as above	12.00	.90

Weight 2¼ Lbs. per Dozen



	List Per Dozen	Retail Value Each
No. 2022S—Stag Handle; Large Blade, Sabre Pattern; Two Blades; Brass Lining and Rivets; German Silver Bolsters and Shield	$15 00	$1 25
No. 2022E—Ebony Handle; Otherwise same as above	15.00	1.25

Weight 3 Lbs. per Dozen

All Above, Half Dozen in a Box

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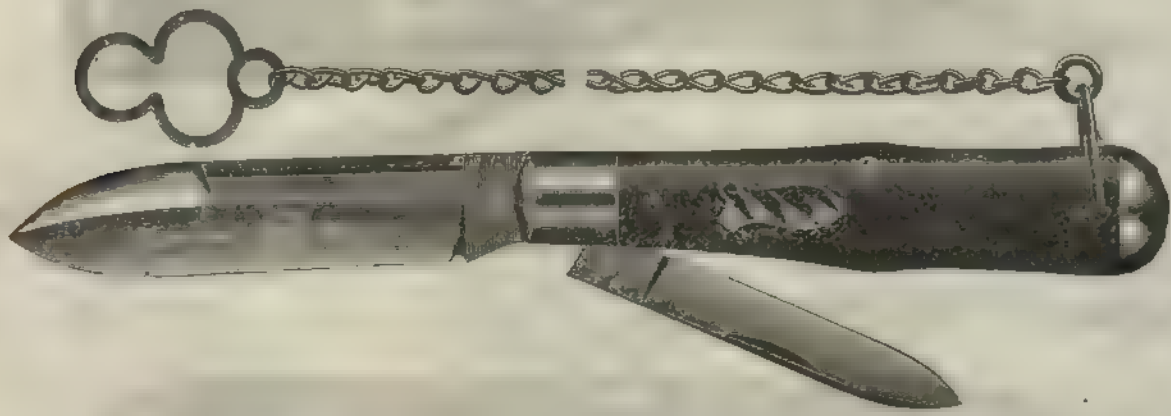


	List Per Dozen	Retail Value Each
No. 2012E—Ebony Handle; Without Chain; German Silver Lining, Rivets, Bolsters and Shield; Fancy Mulled Back; Otherwise same as above	$15.00	$1.25

CLIP POINT

No. 2014E—Ebony Handle; Without Chain; Large Clip Blade; Otherwise same as 2016E	13 00	.90

Weight 3 Lbs. per Dozen

	List Per Dozen	Retail Value Each
No. 2002E—Ebony Handle; Sabre Pattern Large Blade, Brass Lining and Rivets, German Silver Bolsters and Shield	12 00	.75

CLIP POINT

No. 2004E—Ebony Handle; Large Clip Blade, Sabre Pattern, Otherwise same as above	12.00	.75

Weight 3 Lbs. per Dozen

	List Per Dozen	Retail Value Each
No 2018E—Ebony Handle; Two Blades; Brass Lining and Rivets; German Silver Bolsters and Shield	$12 00	$0 75

Weight 2½ Lbs. per Dozen

All Above, Half Dozen in a Box

GENERAL INFORMATION ON FISHING TACKLE

While we do not assume to write with any particular authority on this subject, there being too many conditions of climate and country which enter into it, we offer the following suggestions in as broad a sense as possible, believing that they may prove of assistance to the retail dealer or his clerks by helping them to successfully equip the angler, and thereby open the road to more business along these lines which will yield a profit, wherein we both share.

In the selection of a fishing outfit, one of the main features is variety. Do not allow a customer to leave your store thinking that he is properly fitted out unless he has an assortment to meet the various conditions of streams and weather. Remember that the most alluring and successful baits will not always catch fish, for the bait that kills to-day, may not attract a single fish in the same stream to-morrow. These conditions make it impossible to state positively what to use, but we have gone to infinite trouble in arranging our catalog, to state under each bait the various fish for which it is best suited, and we cannot do better than refer you to these pages, and especially to page 3233-3235 for Trout Flies where descriptions of each, and the conditions under which they should be used, are given. To follow these insures you the best judgment of practical experience.

Let us here call your attention to what is known as Bait Casting, one of the more modern methods, and perhaps the most interesting and successful kind of fishing. In this style the fisherman practically goes after the fish instead of waiting for him to come and bite. The angler formerly practiced what is known as Still Fishing, using a cork float which would bob up and down in the water to notify him when he had a bite. But he found this method too tiresome and monotonous. Therefore, we heartily recommend the new method of bait casting as a more active sport, in which the fisherman is always busy and interested, and in which his skill determines the amount of the catch.

The art is simple, and but briefly outlined here. Use a short Rod, a Free Running Reel, Braided Silk Line and various baits (artificial minnows preferred). Wind in the line till bait is close against the end of the rod, place the thumb on the spool of reel in order to regulate the speed and distance of the cast, then, using the thumb as a Brake, throw the rod, from over the shoulder forward, the same as a small boy throws an apple off a stick. Then slowly wind in the line; as soon as a fish strikes, the angler should strike too, and the fish will be hooked.

After becoming proficient, the master of this little art will never return to the old practice of Stil Fishing. As stated, the rods are short, and made especially for the purpose, as are also the reels; the lines and various baits we show in complete assortments, and refer to the following pages where same are carefully listed.

For any style of fishing, the outfit must be right and must be selected with consideration as to fish's requirements as well as to buyer's individual tastes, otherwise results cannot be expected. This branch being too large to more than mention it here, we have so arranged our pages as to give the special as well as general uses for each article.

Let us also make special mention of Leaders, which so many people fail to make any note of and which are one of the things most necessary and in which quality is essential. Remember the finest equipment with poor leaders means 10 to 1 the big fish will be lost. For this reason we have carefully selected our stock and can assure you that they are the finest Silkworm Gut. Moisten, before using.

Such paraphernalia as Tackle Boxes, Fly Books, Waders, Landing Nets, Gaff Hooks, Baskets, Fly Dope, Drinking Cups, Scales, etc., etc., all add to the pleasure of the Angler, yet he usually goes without because the clerk seldom calls his attention to them. To remind the possible customer and explain the advantages of such equipment means to sell it. A Base Ball Team could play without gloves, but it would detract from the pleasure of the game and be inconvenient. This like displeasure and inconvenience are experienced by the angler who goes without these accessories which are practically necessities.

In summing up this article, let our last expression be variety; it is the keynote to successful angling; it is even more the prime requisite of the successful merchant whose stock must catch both the man and the fish.

Also, it is much easier to sell two dozen assorted baits than two dozen of a kind.

FISH—WHERE FOUND AND THE TACKLE TO USE

The Trout, perhaps the most sought after and best game fish of any, is always found in clear water; the best fishing being in quick running streams, the Brook or small Trout, being found principally in streams which are supplied by springs, the Lake Trout in large streams and in lakes. Both species can usually be caught with flies but can at times, especially the spring of the year, be taken with worms and various spoon and spinner baits. Let us here again mention variety, as the angler cannot tell before trying a stream what kind of flies or other baits are going to prove killers. Conditions of weather and stream enter so much into the subject. To give definite information is impossible, but we refer you to a tabulated list of flies on page 3233-3235, where we have endeavored to classify them as best possible. However, let not the fisherman be discouraged if his first baits fail to catch a trout. Keep on trying, for they are the wiliest of any fish. To deceive them is hard, to catch them is an art, and the more pleasure therefore.

The small mouthed, Black Bass, also of the game fish species, and one which provides unlimited sport for the angler, is found in clear water, and can be caught with various artificial baits and flies, the artificial minnow being perhaps the most alluring. The Bass are often spoken of as "not biting," and this saying is partially true, meaning they are not hungry, but a peculiar thing about bass is the fact, that when not hungry you cannot offer a tempting enough bait for them to want to eat; but, an attractive bait which will sink or troll into deep water, or along shore, under the shadow of logs or large boulders, where they bide when wishing to rest, will annoy them to such an extent that they will madly rush to kill the intruder. We firmly believe that with a variety of baits to meet these conditions no angler need return from a fishing trip without at least a small catch.

The Pike, Perch and Pickerel are similar in their habits and are found in almost any water, frequently among lily pads and rushes. The Pike specially delights in the deeper, slow running streams. Both Pike and Perch are more particular about the water they live in than the Pickerel, who is careless, and will live in practically anything. All of these can be taken with most any variety of baits, the spoon and minnow being particularly alluring. All provide good sport for either casting or trolling.

The Muskallonge is found in large bodies of water and can be taken with Minnows, Spoon and Spinning Baits. It provides excellent trolling and fills the desire of an angler to capture large fish.

The Salmon is one of the best game fish when found in rivers; the only regrettable fact being that the sport is so limited.

On account of conditions being so varied in different sections, it is impossible to give any information regarding baits which would cover sufficient territory, to be of use to your customers.

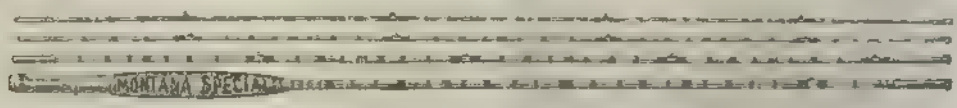
We have given the above as near as possible to facts, based on the observations of many anglers. We expect, however, that others will in many cases have different opinions, and will hold them as being correct. Therefore, we merely ask this to be taken as definite information applying in general to streams in the Northwest, and expect both the dealer and angler to use their knowledge of local conditions in conjunction with the above.

FISHING RODS

Fly or Trout

SPLIT BAMBOO

All Made of Six Strips of Fine Quality Bamboo, Carefully and Firmly Cemented, Wound and Varnished



MONTANA SPECIAL

Made from India Steelvine which is the toughest and most elastic fiber ever put into a Fishing Rod. This Rod is quick in action and very powerful, Has the strength to lift a long heavy line from the water and cast true and steady under all conditions, Although the weight is 7 oz. It does not feel to the hand as heavy as the scales show, owing to the scientific adjustment of the weight throughout the entire length. Each Joint is made of Six Strips cemented together and wound with Red, Black and White Silk, every three quarters of an inch; Splitting of the Strips is done by hand and the greatest care is used so that possibility of any transverse cuts which would destroy the elasticity or weaken the Rod are eliminated. This Rod is made with 10 in. Solid Cork Grip which is much longer and thicker than usual, giving a wide range of grip for different styles of handling. This Rod is absolutely unequaled for its lightning "recovery" and swift, powerful casting qualities.

Each

No. F37—Three Piece and Extra Tip; Length 9 ft.; Full Bronzed Mountings, Improved Lock-Tight Ferrules, Hand Made, Reel Plate, Bronzed Steel; Snake Guides..... $25.00

Weight 7 Oz. Each

Note—Each Montana Special Rod is provided with Mottled Bamboo Walking Stick Receptacle for two Tips in order to properly preserve them when not in use

PRESIDENT

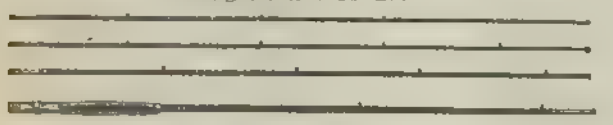
Hexagonal, Special Selected Calcutta Split Bamboo, Closely Wound with Red and Black Silk in Clusters, German Silver Mountings, Welted Ferrules, Silk Wound Snake Guides and Ring Top; Solid Cork Grip with Hand-Made Seat below Handle.

Each

No. F40—Three Joints and Extra Tip; Length 9 to 10 ft....$20.00

One on a Leather Capped Velvet Covered Form in Canvas Bag

Weight 5 to 7 Oz. Each



EXPERT

Round, Closely Wound with Garnet and Orange Silk, Full Nickel Plated Mountings, Welted Ferrules and Band, Snake Guides and Ring Top; Cork Grip, with Patent Reel Seat below Handle.

Each

No. F42—Three Joints and Extra Tip; Length 9 to 10 ft....$11.00

One on a Leather Capped Velvet Covered Form in a Canvas Bag

Weight 6 to 7 Oz. Each

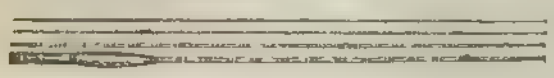
Hexagonal, Fancy Silk Border Windings, Full Nickel Plated Mountings, Improved Welted Ferrules, Snake Guides and Ring Top; Cork Grip, Inlaid with Cedar just above Cork; Solid Reel Seat below Handle.

Each

No. F44—Three Joints and Extra Tip; Length 9 ft.....$8.50

One on a Velvet Covered Form in a Canvas Bag

Weight 6 Oz. Each



TONKINVINE

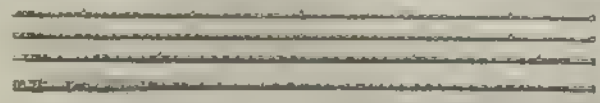
Tonkinvine is a material having the Strongest, Toughest and at the same time the most Pliable and Elastic Fibre ever put in a Fishing Rod; Each Section is Tested and Guaranteed Perfect Six Sections, cemented together in such a way that makes the Rod nearly Round; Fancy Windings of Scarlet and Green Silk in Clusters, Nickel Plated Mountings, Improved Welted Ferrules, Silk Wound German Silver Snake Guides and Ring Top; Cork Grip, with Solid Metal Reel Seat below Handle; Welted Band; Finely Finished.

Each

No. F45—Three Joints and Extra Tip; Length 9 to 10 ft.....$8.00

One on a Flannel Covered Form in a Canvas Bag

Weight 5 to 6 Oz. Each



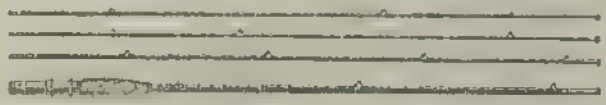
Hexagonal, Fancy Windings of Garnet and Lemon Silk in Clusters, German Silver Mountings, Welded Ferrules and Band, Silk Wound Bronze Steel Snake Guides and Fly Top; Solid Cork Grip, Hand-Made Reel Seat below Handle.

Each

No. F41—Three Joints and Extra Tip; Length 9 ft.....$12.00

One on a Velvet Covered Form in a Canvas Bag

Weight 5¾ Oz. Each



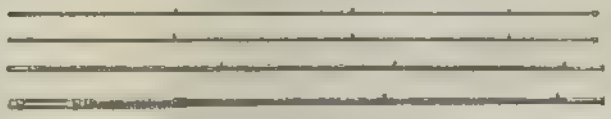
Hexagonal, Fancy Windings of Red and Orange Silk, German Silver Mountings, Welted Ferrules and Band, Snake Guides and Ring Top; Cork Grip, with Aluminum Reel Seat below Handle.

Each

No. F43—Three Joints and Extra Tip; Length 8¼ ft.....$9.00

One on a Velvet Covered Form in a Canvas Bag

Weight 4¼ Oz. Each



YELLOWSTONE SPECIAL

Made from Six Sections of Select Tonkin Cane, put together in such a way that we have no hesitancy in recommending this Rod as thoroughly satisfactory for all around work.

Swelled Butt, inlaid with Cedar above the Grip; This reinforcement gives the Rod more "backbone"; Full Nickel Plated Mountings; Solid Metal Reel Seat below Handle; Improved Ferrules, Welted, Silk Wound, German Silver Snake Guides, closely wrapped with Scarlet and Black Silk

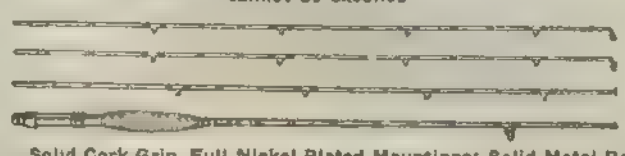
Each

No. F43½—Three Joints and Extra Tip; Length 8½ ft.....$8.00

Weight 6 Oz. Each

CANTONVINE FLY RODS

Cantonvine derives its name from a Fibrous Vine, Native to China; for Strength, Toughness and Pliability, Cantonvine cannot be excelled



Solid Cork Grip, Full Nickel Plated Mountings; Solid Metal Reel Plate below Handle; Watertight Reinforced Ferrules; German Anti-Friction Agate Tops and First Guides; English Snake Middle Guides. Broad wrappings of Scarlet and Black Silk.

Each

No. F45½—Three Joints and Extra Tip; Length 9 and 9½ ft.$8.50

One in a Flannel Covered Form in a Canvas Bag

Weight 6¼ Oz. Each

Note—The weights given above are for the Rods only and do include Form and Bag which weigh about 13 Oz. additional

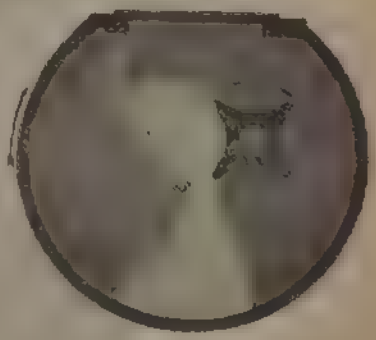
THE NEW MODEL MINNETONNA HOME CREAMERY

Improved in Construction—Reduced in Price—Now made in only 3 Sizes

Here is a butter-making machine that has enabled hundreds of farmers who knew nothing about butter-making to make a success with their first attempt, to get much more for their cream by selling it as high-grade butter instead of sending it to the big creameries or centralizers.

The Minnetonna is more than a churn—for it not only shortens the time of churning and does it more efficiently but it also works the butter quickly and properly. In fact, it is difficult to make a failure in a Minnetonna. It is made so easy for the operator to do everything just as it should be done to make the highest grade butter. It completes the whole operation of butter-making—churning, draining off the buttermilk, washing, working, incorporating proper amount of moisture and salt—all in less than half an hour—all in the same container without touching the contents from the time you pour in the cream until you take out the finished butter—and with the assurance of getting fine quality butter every time. Contrast this modern way of making butter with the long, laborious, wearisome and uncertain process of the ordinary farm churn.

The Minnetonna Home Creamery is, in working principle, really a miniature of the wonderfully efficient butter-making machines used in big creameries—so simplified and perfected in construction, so modified in size and price that it is placed within reach of the average farmer. It is easy running, simple in design, easy to operate, sanitary and easy to keep clean. It has many exclusive patented features—among them the adjustable, removable Basket and Rolls, which feature alone make the Minnetonna 200 to 500 per cent more efficient—2 to 5 times faster than the ordinary barrel or dasher churns. In churning the cream is vigorously dashed against and through this Basket and is so thoroughly agitated that the butter "comes" just so much sooner. The adjustable feature of this Basket also enables you to adjust it to properly work a small or large quantity of butter, as shown in the illustrations. This is one of the new features of the improved model of the Minnetonna. It is one of the things that has enabled the manufacturers to reduce the factory cost on each machine and hence the price—for now only three different sizes of the Minnetonna fulfill the same requirements that were formerly covered by eight different sizes.



Cross section view of Minnetonna Home Creamery, showing how the Butter is worked between two Rolls.

The Ripening Coil now furnished as an extra is a big help in insuring uniformly good results in butter-making. Enables the operator to ripen the cream just right over night. Full directions for using contained in the complete butter-making instruction book which goes with every Minnetonna Home Creamery.

No. 3-A—Minnetonna Home Creamery; Hand and Power; Churning Capacity, with Barrel Half Full, 12 Gallons; Working Capacity, 3 to 20 Lbs.; Can be Belted to your Gasoline Engine; Pulley, 8x2¼ in.; Speed, 200 R. P. M.; Floor Space Required, 2 ft. 8 in. by 2 ft. 7 in.; Shipping Weight, 210 Lbs.

Another important new feature of the improved model Minnetonna, is the metal stand, taking the place of the wooden stand on the old models. It is much stronger and more substantial. In other parts also, the quality of material, construction and workmanship is just as good, if not a little better, than in the former models. Not in the slightest detail have the manufacturers skimped to bring down the price. They have depended entirely on greater factory efficiency, standardization of the machine and increased production to reduce the cost per machine.

A money-maker not alone because the margin of profit is a good one, but also because the market is as big as that of the cream separator—and because this market is being intensively cultivated by extensive advertising in the farm papers, and by the practical selling help extended to dealers by the manufacturers

No. 2-C—Minnetonna Home Creamery, with part of Side and one End cut away to show the position of Basket and Working Roll inside of all Minnetonna Home Creamery models.

A Money Maker and Friend Maker for Dealers

It's a friend-maker for you because with the guaranty and expert butter-making service behind it, the farmers who buy it on your recommendation are sure of success in the butter-making business, are sure of increasing their income from their dairy herd—and what farmer would not be grateful for being shown how to make more money?

Consider how much easier it will be to sell the new models of Minnetonna Home Creameries at the new low prices—which means a reduction of $12.50 to $30.25 from former prices. Consider also the educational publicity work that has been done on the Minnetonna Home Creamery for several years, publicity that has reached hundreds of thousands of farmers and has impressed many thousands so strongly that they have written to the manufacturers for further information. Plans for bigger advertising campaigns than have yet been launched are already completed. Everywhere—in your community as well as in others—there are live, interested prospects for the Minnetonna Home Creamery. They will be kept interested. You can sell them and pocket your profit if you get behind this proposition.

Factory Number	Capacity Direct Barrel Full	Butter Working Capacity	Floor Space Required	Shipping Weight	Style	Each
3-A	12 Gallons	3 to 20 Lbs.	2 ft. 8 in. by 2 ft. 7 in.	195 Lbs.	Hand Power	$27.75
3-AH	12 Gallons	3 to 20 Lbs.	2 ft. 8 in. by 2 ft. 7 in.	210 Lbs.	Hand and Power	33.75
3-AE	Electric Direct Connected		2 ft. 8 in. by 2 ft. 7 in.	250 Lbs.	Hand and Electric	66 25
2-C	20 Gallons	5 to 40 Lbs.	3 ft. 4 in. by 2 ft. 7 in.	250 Lbs.	Hand and Power	39.75
2-CE	Electric Direct Connected		3 ft. 4 in. by 2 ft. 7 in.	280 Lbs.	Hand and Electric	72 25
1 C	45 Gallons	10 to 100 Lbs.	2 ft. 6 in. by 4 ft. 8 in.	475 Lbs.	Power	59 75

Note—If Ripening Coil is wanted, add $4.50 to the price of all No. 3-A sizes, and add $5.25 to No. 2-C size, and $6.25 to No. 1 C size.

MARSWELLS CREAM SEPARATORS

Here is a Cream Separator, simple in construction and extremely durable, yet combining all the desirable improvements that have been used on any Separator. This Separator is the result of many exhaustive tests and experiments, it gets the maximum amount of Cream from the Milk, it has a simple Sanitary Bowl; it has a low Tank and a High Crank; all parts can be adjusted for wear or are easily replaced when broken, it is so simple in construction that any one can adjust or repair it, contrary to most separators on the market, which need experts to fix them when they get out of order.

THE BOWL

This is the heart of the separator—it is the part that separates the cream, and unless this is properly built the separator is almost useless. The top of this bowl is drawn from one piece of steel. This steel is the same as used on high pressure steam boilers, for in a separator it must stand an enormous pressure, the same as in a boiler. Great care is used in making these tops and every one is perfectly true.

The Bowl Bottom is made of Phosphor Bronze, Heavily Retinned; This construction is important, as it will not rust and conrust, and make them easy to wash and keep clean; The Discs are made in pairs; One is perfectly plain, the other has spacers which hold the discs apart and allow the free flow of the milk; These pairs of Discs are so placed that they separate the maximum amount of butter fat from the milk; to do this it only requires that the Bowl be turned 7000 revolutions per minute. Compare this with the 10,000 to 24,000 revolutions to the minute that other bowls with different Discs construction require—think of the saving in power; These Discs also let the milk follow natural laws; the cream comes from the top of the Bowl, the milk from the bottom.

The Bowl Top rests on a rubber ring placed in a groove in the Bowl Bottom. This effectually prevents the Bowl leaking, as this Ring is so placed, that the faster the Bowl spins the greater the pressure on the Ring; the Bowl Top is fastened to the bottom by a hand screw at the top; this eliminates screwing the Bowl top into the bottom and wearing out the rubber ring.

The Upper Bowl Spindle Bearing or Shoulder through which the Spindle revolves, is a patented arrangement made of Phosphor bronze cushioned by thin steel springs. When starting up the separator, this takes up any jar or vibration caused by putting the bowl in action.

Upper Bowl Spindle Bearing

Lower Bowl Spindle

The Lower Bowl Spindle Bearing is made from Phosphor Bronze in which a case hardened tempered Ball travels, on this the Bowl Spindle rests which carries the weight of the Bowl. This bearing is made so that it can be raised and lowered to put the bowl in perfect adjustment.

The Bowl Spindle is made of highly tempered case hardened steel. In the end of the spindle a small piece of tapered case hardened highly tempered steel fits, which rests on the lower Bowl Spindle Bearing and takes all the wear. This can easily be taken out and replaced when it becomes worn, by simply heating the end of the Spindle; it will come out easily, as before it is inserted the Chamber in which it fits is filled with Oil and when the Oil is heated it expands and forces the Steel Point out, making this Steel Point Independent of the Spindle, and the Spindle and Bowl of separate pieces lessens the risk of getting the machine out of order, and makes repair bills a small item.

The Spiral Gear used to drive the bowl spindle is cut in such shape that in case there is any variation in alignment, it works perfectly, in contrast to other makes where the least thing that throws the machine out of alignment, puts it out of commission and takes an expert to fix it.

Every Bearing except the Lower Bowl Bearing and the Neck Bearing is a Ball Bearing; the Balls run on Hardened Steel Cones screwed on to the Shafts; in this manner they protect the shafts from wear of any kind.

The Milk Reservoir is made of the very best grade of heavy tin, bound by heavy Band Iron at the Base, which is carefully Tinned. It is also bound at the top in such a manner as to produce a Nice, Smooth, Round Edge; the Bottom is lowest at the point near the faucet, making it self-draining.

A very important feature of a Separator is its method of Power Transmission. In the Marswells Separator the power is transmitted from the Crank Shaft to the Main Gear by two cut steel Sprocket Wheels, over which travels a cut steel Link Chain; the proper tension on this Chain is easily regulated by an eccentric which carries the Crank Bearing; this Chain Drive is the most direct and effective drive used on any separator; it takes the place of four bevel or two bevel and two miter gears. Consequently, the loss by friction is ¼ of that consumed by Gears and extra Bearings; this chain drive also acts as a cushion, taking up any sudden jerks which the crank may receive and does not transmit them to the Bowl.

ADJUSTABLE WALL BRACKETS

Adjustable Wall Brackets for General Office, Shop, Store and Residence. A Canopy may be used to cover the clip on the first four. Any of the Fixtures shown below may be raised, lowered or swung to either side. The Thumb Nut Hinge, on some, preserves the proper angle of the Lamp with any position of arm. Screws are included; ⅜ in Tubing has same Outside Diameter and Thread as ⅛ in. Iron Pipe.

With Hinged Joint, ⅜ in. Tubing, 23 in. Long

	*Each
No. 14-BB—Brushed Brass	$2.20
No. 14-OC—Old Copper	2.60

With Hinged Joint, ⅛ in. Tubing. First Section 35 in. Long; ⅜ in. Tubing, from Hinge to Lamp 48 in. Over-all; Japanned Steel Bracket, Especially Suited to Machine Shop, Work Bench, etc.; Will take any position

	*Each
No. 4-BB—Brushed Brass	$3.20
No. 4-OC—Old Copper	3.30

With Hinged Joint, ⅜ in. Tubing, 30 in. Long

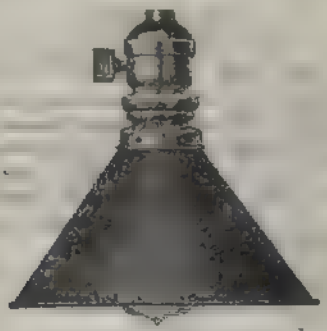
	*Each
No. 3-BB—Brushed Brass	$2.60
No. 3-OC—Old Copper	3.10

Canopy, Socket, Lamp, Shade and Shade Holder are not included, unless so ordered. Measurements given are extreme projection from wall or ceiling to tip of Lamp. All above are One in a Paper Package; Weight ¼ to 1⅝ Lb. Each

All Above, One Dozen in a Standard Package

STEEL AND ALUMINUM SHADES AND REFLECTORS

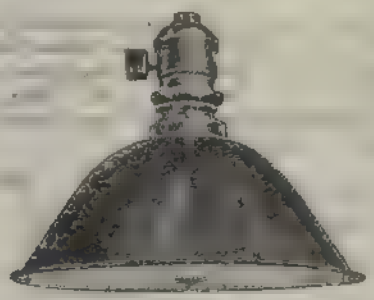
Neat Appliance, not affected by Heat and not Combustible like Celluloid, nor Breakable as the Glass Goods. All, except No. 27BB, are Enameled Green Outside, the Steel Shades are Frosted Inside; the Pure Aluminum are Frosted Inside; the Patent Holder, on all but the Corrugated, is readily attached to a Standard Socket, fits closely, reaches well over shank of Lamp and reflects every ray with a soft clear light.



DEEP CONE
For Mills, Billiard Rooms, etc.

		*Each
No.	26FS— 7 in.; Frosted Steel	$0.70
No.	26FA— 7 in., Frosted Aluminum	.90
No.	268FA— 8 in., Frosted Aluminum	1.30
No.	2610FA—10 in.; Frosted Aluminum	1.60

Weight 1¼ to 2½ Lbs. per Dozen



DOME

	*Each
No. 538—8 in. Diam.; Frosted Aluminum	$1.30
No. 5310—10 in. Diam.; Frosted Aluminum	1.60

Weight 4 Lbs. per Dozen

PARABOLA

Seven in. Shade, with Holder attached; May be turned to any angle desired; Used on Desk Lights, Flexible Stand Lamps and often used with Extension Cords for examining dark corners, bins, machinery, etc.; Completely shades eyes from lamp.

	*Each
No. 27FS—Frosted Steel	$0.70
No. 27FA—Frosted Aluminum	.90
No. 27BB—Brushed Brass Outside, Frosted Inside	1.00

Weight 2 Lbs. per Dozen

ALUMINUM REFLECTORS

CORRUGATED

To Diffuse Light over Large Surface; from Drop Cord, Ceiling Cluster, etc.; Use 2¼ in. Shade Holder.

	*Each
No. 60—Corrugated; 14 in. Diam., Aluminum, Polished Inside, Enameled Green Outside	$2.40

Weight 3 Lbs. per Dozen

DEEP CONE
Frosted Aluminum Inside, Green Outside
FOR 2¼ IN. HOLDER

	Per Dozen
No. 2527—Diameter 8 in.	$2.20
Weight About 2½ Lbs. per Dozen	
No. 2528—Diameter 10 in.	3.50
Weight About 3 Lbs. per Dozen	

Six Dozen in a Standard Package

TIN REFLECTORS

FLAT
Frosted Aluminum Inside, Green Outside
FOR 2¼ IN. HOLDER

	Per Dozen
No. 2502—Diameter 10 in.; Weight 2 Lbs. per Dozen	$2.25

Six Dozen in a Standard Package

No. 2504—Diameter 12 in.; Weight 3 Lbs. per Dozen	3.30

Three Dozen in a Standard Package

FOR 3¼ IN. HOLDER

	Per Dozen
No. 2507—Diameter 14 in.; Weight 4 Lbs. per Dozen	$5.00

Two Dozen in a Standard Package

NATIONAL X-RAY GLASS REFLECTORS

For efficiency in directing light, and for durability, these reflectors have no equal. The glass blanks are one piece, blown in steel molds, annealed and fire glazed, to obtain maximum strength and a perfect surface. All are Green Enameled outside with a pure Silver Plating under the enamel next to the glass, producing the most efficient reflecting surface known. The different styles are designed for the special purpose required. The vertical and spiral corrugations eliminate streaks and shadows.

THE BEEHIVE

The Beehive Reflector is specially designed for illuminating large rooms with high ceilings; Factories, Shops of all kinds, Gymnasiums, Armories, Indoor Handball and Tennis Courts, Press Rooms, Power Houses, etc. all come under this classification. Takes a 3¼ in. Special Shade Holder, which is furnished with each reflector.

No. 785—Diameter 10½ in., Height 11⅝ in.; For 100, 150 or 250 Watt Mazda Lamps $4.50

Four in Standard Package
Weight 50 Lbs. per Package

WINDOW REFLECTORS

THE SCOOP

This Reflector effectually meets the demand for a reflector of the highest efficiency for the lighting of a large class of show windows of the average size. Takes a 2¼ in. Shade Holder. Holders not furnished with this Reflector.

No. 777—Width 9 in., Depth, front to back, 7½ in., Height including neck 7¾ in.; For 40 or 60 Watt Mazda Lamps $3.00

15 in Standard Package
Weight 65 Lbs. per Package

THE HELMET

The Helmet Reflector is intended for high and large windows; is a genuine searchlight and very concentrating; is also extensively used and perfectly adapted for use over skylights and for the lighting of factories, press rooms and other interiors where great concentration is required. Takes 3¼ in. Special Shade Holder, which is furnished with each Reflector.

Each

No. 786—Diameter 12 in., Height 11½ in.; For 60, 100 or 150 Watt Mazda Lamps $5 00

Four in Standard Package
Weight 50 Lbs. per Package

GLASS CONE REFLECTORS

Green Cased; for 2¼ in. Holder

Per Dozen

No. 62-7—Height 5 in., Diameter 7 in. $4.50

Three Dozen in a Package; Weight 33 Lbs. per Package

No. 62-10—Height 5 in., Diameter 10 in. 9 00

One Dozen in a Package; Weight 20 Lbs. per Package

FLAT OPAL SHADES

For 2¼ in. Holder

Per Dozen

No. 60-8—Diameter 8 in. $2 40
Eight Dozen in a Package; Weight about 40 Lbs. per Package

No. 60-10—Diameter 10 in. 3.40
Four Dozen in a Package; Weight about 40 Lbs. per Package

No. 60-12—Diameter 12 in. 6.00
Four Dozen in a Package, Weight about 50 Lbs. per Package

No. 60-16—Diameter 16 in. 12.00
Two Dozen in a Package; Weight about 40 Lbs. per Package

AIR O LITE GASOLINE VAPOR LAMPS

Generates its own Gas from common Gasoline; Gives more light than five big Kerosene Lamps or three Gas Lamps; Explosions are impossible and there is no danger from fire if the Lamp is accidently upset; There is no smoke or odor, no dirty chimney or greasy wick; Saves its cost in a very short time Made of Heavy Brass, Nickel Plated; Takes an Inverted Rag Mantle, costing 10 cents each; Has no delicate parts and will last many years in continuous service, Fill it once a week, Clean it once a year, Fount (except No. M322) Holds 2 Quarts of Gasoline; Will burn continuously for 25 hours.

Each

No. A318—Height 22 in.; With Beautiful Shade of Brown and Tan Tints, decorated with delicate Green Vine and Pink Roses $10 80

Weight 12 Lbs. Each

Each

No. A317—Height 22 in.; With Glass Shade, Rough Etched Outside, Polished Inside; 3½ in. Crystal Fringe $10.80

Weight 12 Lbs. Each

Each

No. A307—Height 22 in.; With No. 307 Opal Glass Shade.$10 00

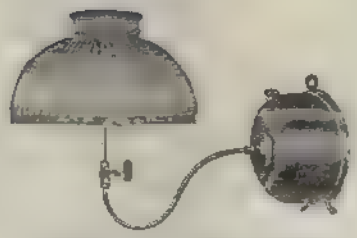
No. A322—With No. 322 Shade, Otherwise same as above.$10 00

Weight 10 Lbs. Each

Each

No. M322—Height 20 in.; Holds 3 Pints of Gasoline; Burns 15 to 18 Hours; With No. 322 Mellotone Opal Glass Shade....$9.00
No. M324 Shade Decorated in Delicate Green, Otherwise same as above $9 50
No. M307—With No. 307 Shade, Otherwise same as above. $8 50

Weight 11 Lbs. Each



BRACKET OR WALL LAMPS

This Lamp is very handy for use in Kitchens or Rooms with low ceilings, over Desks in Office or Stores, for Church Choirs in Country Churches, etc.

Each

No. PB307—Fount Holds 2½ Pints of Gasoline; Will Burn 12 to 15 Hours; With No. 307 Shade.....$9.00

AIR-O-LITE CHANDELIER LAMPS

For Stores, Churches, Halls, Billiard Rooms, Barber Shops, School Rooms and Large Rooms in Residences; Can use One or Both Burners at a time.

Each

No. P307 Fount Holds 6 Pints of Gasoline and supplies both Burners 16 to 18 Hours; With No. 307 Shade...$15.00

Weight 16 Lbs. Each

No. 323—Chimney

AIR-O-LITE LANTERNS

Burns on the same principle as the Air-O-Lite Lamp, but is made for Out-door Use.

Each

No. IL323—Fount Holds 3 Pints, Burns about 15 Hours; Gives 300 Candle Power; Can be turned low and is extinguished by closing a valve...$8.50

Weight 6 Lbs. Each

No. 323—Mica Chimneys, for Air-O-Lite Lanterns; Height 5 in., Diam. 5 in $0.70

Above Lamps are Packed One in a Box, Complete with Shade, Two Mantles, Pump, Wrench, Hanger, Lighting Torch, Alcohol Bottle, Holder for same and Extra Filters, Screens, etc.

SHADES FOR AIR-O-LITE LAMPS

Each

No. 318—Opal Shade, decorated in Brown and Tan Tints with delicate Vine and small Pink Roses; Diam. 11 in.....$1 80

Weight 3 Lbs. Each

Each

No. 307—Opal Ribbed Shade; the Standard Shade for any Air-O-Lite Lamp; Diam. 10 in $0.80

Weight 2 Lbs. Each

Each

No. 322—Mellotone Opal Shade for the No. M322 Lamp; Diam. 11 in..$1.50

Weight 3 Lbs. Each

Each

No. 324—Same as No. 322, Etched and Tinted in Delicate Green; With 6 Pink Roses; Diam. 11 in..$2.00

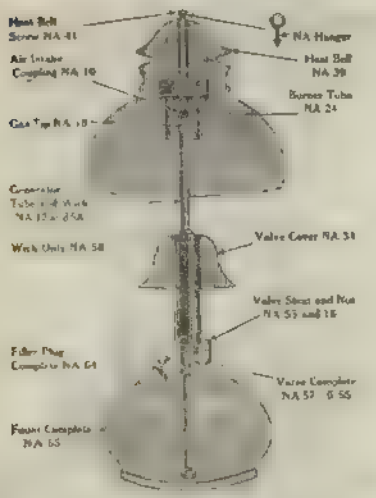
Weight 3 Lbs. Each

Each

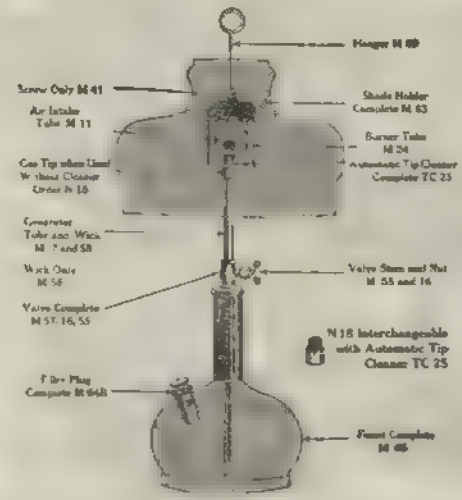
No. 317—Etched Shade with Crystal Fringe; Produces a subdued Light, very restful to the Eyes; Diam. 10½ in.....$1 80

Weight 2½ Lbs. Each

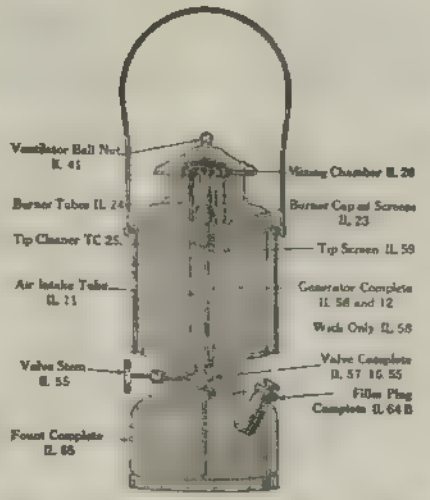
PARTS FOR AIR-O-LITE LAMPS


Heat Bell Screw NA 41
NA Hanger
Air Intake Coupling NA 10
Heat Bell NA 39
Burner Tube NA 24
Valve Cover NA 34
Valve Stem and Nut NA 55 and 16
Filler Plug Complete NA 64
Valve Complete NA 57 16 55
Fount Complete NA 65

Nos.		Each
NA10	—Air Intake Coupling	$ .40
NA12-58	—Generator Tube and Wick	.20
NA24	—Burner Tube	.20
NA34	—Valve Cover	.80
NA39	—Heat Bell	.60
NA41	—Heat Bell Screw	.10
NA55-16	—Valve Stem and Nut	.40
NA57 16-55	—Valve Complete	.90
NA58-59	—Asbestos Wick and Tip Screen	.10
NA64½	—Filler Plug Complete	1.20
NA65	—Fount Complete with Filler Plug	6.00
NA69	—Harger	.10


Hanger M 69
Screw Only M 41
Shade Holder Complete M 63
Air Intake Tube M 11
Burner Tube M 24
Automatic Tip Cleaner Complete TC 25
Generator Tube and Wick M 12 and 58
Wick Only M 58
Valve Stem and Nut M 55 and 16
Valve Complete M 57 16 55
N18 Interchangeable with Automatic Tip Cleaner TC 25
Filler Plug Complete M 64B
Fount Complete M 65

Nos.		Each
M11	—Air Intake Tube	$
M12-58	—Generator Tube and Wick	.80
M24	—Burner Tube	.20
MTC25	—Automatic Tip Cleaner	.80
M41	—Heat Bell Screw	.10
M55 16	—Valve Stem and Nut	.30
M57-16-55	—Valve Complete	.90
M58-59	—Asbestos Wick and Tip Screen	.10
M63	—Shade Holder Complete	.40
M64B	—Filler Plug Complete	.80
M65	—Fount Complete with Filler Plug	6.00
M69	—Harger	.10


Ventilator Ball Nut IL 41
Mixing Chamber IL 26
Burner Tubes IL 24
Burner Cap and Screen IL 23
Tip Cleaner TC 25
Tip Screen IL 58
Air Intake Tube IL 21
Generator Complete IL 58 and 12
Wick Only IL 58
Valve Stem IL 55
Valve Complete IL 57 16 55
Filler Plug Complete IL 64 B
Fount Complete IL 65

Nos.		Each
IL21	—Air Intake Tube	$ .30
IL23	—Burner Cap and Screen	.30
IL24	—Burner Tube	.20
ILTC25	—Automatic Tip Cleaner	.70
IL26	—Mixing Chamber	1.00
IL41	—Ventilator Ball Nut	.10
IL55	—Valve Stem Only	.30
IL57-16-55	—Valve Complete	.80
IL58-12	—Generator Tube and Wick	.60
IL58-59	—Asbestos Wick and Tip Screen	.10
IL64B	—Filler Plug Complete	.80
IL65	—Fount Complete with Filler Plug	5.00

AUTOMATIC TIP CLEANERS
Complete with Gas Tip

	Each
No. MTC25—For Nos. M322, PB307 and P307 Lamps	$0.70
No. ATC25—For Nos. A317 and A318 Lamps	.70

GAS TIPS

No. NA18—For Nos. A317 and A318 Lamps
Each $0.30

GAS TIPS

No. N18—For Nos. M322, PB307 and P307 Lamps
Each $0.30

GAS TIPS

	Each
No. TC18—Standard Tip for No. 25 Tip Cleaners Shown at Left	$0.20

CLEANING TOOLS

	Per Set
No. CT—Envelope Contains Set of Cleaning Tools, Asbestos and Screen	$0.30

DIRECTIONS FOR ASSEMBLING AND OPERATING

For convenience and safety in handling the lamp is packed in four parts, namely: Fount Generator Burner and Valve Cover

TO ASSEMBLE THE LAMP

First—Remove the Filler Plug (NA64½) and lay it aside. Rub a little softened soap on the Thread of the Stem that projects through the top of the Fount and on this screw the Valve (NA57) which is attached to the Generator. Tighten this joint with the wrench using enough force to bring the threads tightly together, but not enough to strip them. Leave the Valve in such a position that the Stem (NA55) will not interfere with the Filler Plug.

Second—Place the Valve Cover (NA34) over the Generator, allowing it to come down around the Handle and rest on top of the Fount. This cover rests loosely in position and may be raised and supported by the Handle while Filling and Lighting the Lamp.

Third—Fasten the Burner to the Lamp Standard by threading the Tip (NA18) into the Air Intake Coupling (NA10) which is located between the two Burner Tubes.

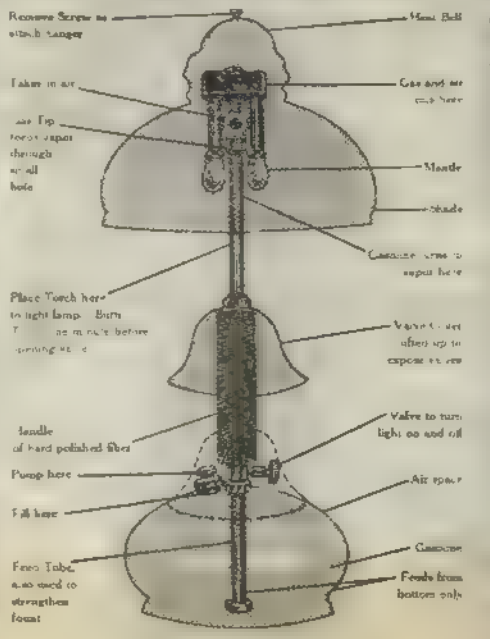
Now the Lamp is assembled and ready to fill and test. This test is important, as it will show whether or not the Joint where the Valve attaches to the Fount is properly tightened.

TO FILL THE LAMP

Fill the Lamp with 2 quarts of clean gasoline. Replace the Filler Plug (NA64½) using the wrench to tighten it. Open the Air Inlet by loosening the Air Stem (NA54a) about one turn. Hold the tip of the Pump firmly in the Pump Seating Washer (NA39½) and pump into the Fount about 30 strokes of air. Tighten the Air Stem with the fingers. Now examine the Joint between the Valve and Fount. If there is any leak tighten it with the wrench until the leak is stopped.

TO PUT ON MANTLES AND SHADE

Tie the mantles on the Burner Caps (NA23) according to the directions printed on the mantle envelopes.


Remove Screw to attach Harger
Heat Bell
Takes in air
Gas and air mix here
Tip forces vapor through small hole
Mantle
Shade
Generator arms to support burner
Place Torch here to light lamp. Burn
Valve Cover when up to expose to view
Handle of hard polished fiber
Valve to turn light on and off
Pump here
Air space
Fill here
Generator
Feed Tube, also used to strengthen fount
Feeds from bottom only

See that the Air Regulator Cap (NA11½) is open. Loosen the Heat Bell Screw (NA41) and remove the Heat Bell (NA39). Put two Springs (NA69) over the Burner Tubes and rest them against the lower edge of the Ring or Nest of the Shade which rests on the supporting caps at the ends of the Metal Band. These rings may be slightly bent in order to fit the Shade. Drop the Heat Bell Pin (NA6) over the Stem (NA40) with the ends of the Spring pointing downward as they will rest on the upper edge of the Shade and hold it securely. Place the Heat Bell (NA39) in position and fasten securely with Screw (NA41) or the Hanger.

TO LIGHT LAMP

With the screws found in the alcohol bottle, fasten the bottle holder to the wall in some convenient place not far from the match case. Fill bottle with wood alcohol. Take the saturated torch from the bottle and place around the Generator or Lamp Stem on a level with the bottom of the Shade. Light and let it remain until nearly burned out. Then raise the Cover (NA34) and open the Valve (NA55). The Mantles will light from the flame of the torch.

Regulate the Air Supply with the Disc (NA11½) on the end of the Air Intake Tube (NA11). After once adjusting same to the point where the whitest light is secured, this needs no more regulating unless accidentally moved. After lamp has been used two or three evenings it will be less brilliant on account of decreased air pressure. A few extra strokes with the pump will bring the lamp up to full candle power.

For ordinary use the lamp will require filling only about once a week.

Always fill lamp by daylight.

The best results are obtained by using gasoline that has been strained through cloth or chamois.

POPULAR ALARM CLOCK ASSORTMENTS

Mission Stand, 13 in. High

This Stand will display Alarm Clocks so they will sell themselves

Per Assortment

No. 101—Assortment of Fifty Clocks, Complete with Three Step Mission Display Stand; 13 in. High $101.25

Weight 125 Lbs. per Assortment

Assorted as Follows:

	Catalog Page	Retail Price Each	Total Retail Value
1 Only, No. 1C —Baby Wireless, Burnished Copper Finish	2770	$2.00	$ 2.00
1 Only, No. 1S —Baby Wireless, Satin Silver Finish	2770	2.00	2.00
1 Only, No. 1FB—Baby Wireless, French Bronze Finish	2770	2.00	2.00
1 Only, No. 1N —Baby Wireless, Nickel Finish	2770	2.00	2.00
1 Only, No. 1B —Baby Wireless, Lemon Brass Finish	2770	2.00	2.00
6 Only, No. 2C —The Wireless, Burnished Copper Finish	2768	2.00	12.00
3 Only, No. 2FB—The Wireless, French Bronze Finish	2768	2.00	6.00
3 Only, No. 2B —The Wireless, Lemon Brass Finish	2768	2.00	6.00
3 Only, No. 2OC—The Wireless, Oxidized Copper Finish	2768	2.00	6.00
4 Only, No. 3C —Jumbo Wireless, Burnished Copper Finish	2776	2.50	10.00
2 Only, No. 3FB—Jumbo Wireless, French Bronze Finish	2776	2.50	5.00
2 Only, No. 3B —Jumbo Wireless, Lemon Brass Finish	2776	2.50	5.00
2 Only, No. 3OC—Jumbo Wireless, Oxidized Copper Finish	2776	2.50	5.00
5 Only, No. 3M —Marathon 8-Day, Assorted Finishes	2765	3.50	17.50
5 Only, No 95 —Wizard, Nickel Finish	2771	1.75	8.75
10 Only, No. 120 —Aerogram, Nickel Finish	2772	1.00	10.00
Total			$101 25

BABY WIRELESS ALARM CLOCK ASSORTMENTS

Mission Rack, 10½ in. High

Per Assortment

No. 102—Assortment of One Dozen Baby Wireless Alarm Clocks, Complete with Mission Hardwood Display Rack, 10½ in. High $24.00

Weight 30 Lbs. per Assortment

The Baby Wireless has an Intermittent Light Sounding Alarm; It is 3½ in. High, 2½ in. Deep and has a 2 in. White Porcelain Dial; the Case is made of Seamless Brass and is Dust-Proof.

For Full Size Illustration and Complete Description, see Page 2770

Assorted as Follows:

	Retail Price, Each	Total Retail Value
3 Only, No 1C —Burnished Copper Finish	$2 00	$ 6.00
3 Only, No. 1FB—French Bronze Finish	2.00	6.00
3 Only, No. 1B —Lemon Brass Finish	2.00	6.00
3 Only, No. 1OC—Oxidized Copper Finish	2.00	6.00
1 Only, Display Stand	Free	
Total Retail Value		$24.00

There is nothing that will so stimulate the sale of Alarm Clocks as having them attractively displayed; It is not so necessary to make a big display as it is to make an impression on the mind of the customer, in a way that will create a desire for the article offered for sale; There are many different kinds of Alarms on the market, and there is a constant and increasing demand for dependable Time Pieces; the Display Stand and Rack shown above, are the best means we have ever seen for attracting attention and creating sales.

INTRODUCTORY ALARM CLOCK ASSORTMENT

Fifty High Grade Alarm Clocks and Six Articles Free

Baby Wireless
See Page 2770
Height 3½ in.
Diam. 2¼ in.
Dial 2 in.

The Wireless
See Page 2768
Height 6½ in.
Diam. 4 in.
Dial 4 in.

Jumbo Wireless
See Page 2766
Height 8 in.
Diam. 6½ in.
Dial 4¼ in.

Wireless Call
See Page 2767
Height 7½ in.
Diam. 5¼ in.
Dial 4½ in.

Junior Wireless
See Page 2769
Height 5 in.
Diam. 4 in.
Dial 2½ in.

Eight-Day Marathon
See Page 2765
Height 8 in.
Diam. 6 in.
Dial 4¼ in.

Excello
See Page 2769
Height 4¼ in.
Diam. 3¼ in.
Dial 2 in.

Baby Call
See Page 2770
Height 3½ in.
Diam. 2½ in.
Dial 2¼ in.

Wizard
See Page 2771
Height 6⅓ in.
Diam. 4¾ in.
Dial 4½ in.

New Rival
See Page 2774
Height 6½ in.
Diam. 4⅛ in.
Dial 4 in.

Aerogram
See Page 2772
Height 6½ in.
Diam. 4⅛ in.
Dial 4 in.

Free with This Assortment
2 Clock Posters
1 Eight-Day Mahogany Stand
1 Wireless Mahogany Stand
1 Baby Wireless Mission Stand

Per Assortment
No. 5901—Assortment Contains Fifty High Grade Alarm Clocks, as listed below, and fully described on the Catalog Pages given above $111.00

Weight 110 Lbs per Assortment

Assorted as Follows:

		Retail Price
1	No. 2C —Baby Wireless, Copper Finish	$3.00
1	No. 2F—Baby Wireless, French Bronze Finish	3.00
1	No. 2N —Baby Wireless, Nickel Finish	3.00
1	No. 2B —Baby Wireless, Lemon Brass Finish	3.00
1	No. 2OC—Baby Wireless, Oxidized Copper Finish	3.00
1	No. 2S —Baby Wireless, Satin Silver Finish	3.00
1	No. 3C —The Wireless, Copper Finish	4.00
1	No. 3F —The Wireless, French Bronze Finish	4.00
1	No. 3N —The Wireless, Nickel Finish	4.00
1	No. 3B —The Wireless, Lemon Brass Finish	4.00
1	No. 3OC—The Wireless, Oxidized Copper Finish	4.00
1	No. 3S —The Wireless, Satin Silver Finish	4.00
1	No. 4C —Jumbo Wireless, Copper Finish	5.00
1	No. 4F —Jumbo Wireless, French Bronze Finish	5.00
1	No. 4B —Jumbo Wireless, Lemon Brass Finish	5.00
1	No. 4OC—Jumbo Wireless, Oxidized Copper Finish	5.00
1	No. 4S —Jumbo Wireless, Satin Silver Finish	5.00
1	No. 8C —Eight-Day Marathon, Copper Finish	5.00
1	No. 8B —Eight-Day Marathon, Lemon Brass Finish	5.00
1	No. 8S —Eight-Day Marathon, Satin Silver Finish	5.00
1	No. 5C —Wireless Call, Copper Finish	2.50
1	No. 5F —Wireless Call, French Bronze Finish	2.50
1	No. 5B —Wireless Call, Lemon Brass Finish	2.50
1	No. 5OC—Wireless Call, Oxidized Copper Finish	2.50
1	No. 5N —Wireless Call, Nickel Finish	$2.50
1	No. 5S —Wireless Call, Satin Silver Finish	2.50
1	No. 6C —Junior Wireless, Copper Finish	2.00
1	No. 6FB—Junior Wireless, French Bronze Finish	2.00
1	No. 6N —Junior Wireless, Nickel Finish	2.00
1	No. 6B —Junior Wireless, Lemon Brass Finish	2.00
1	No. 6OC—Junior Wireless, Oxidized Copper Finish	2.00
1	No. 6S —Junior Wireless, Satin Silver Finish	2.00
1	No. 6C —Excello, Copper Finish	2.00
1	No. 6FB—Excello, French Bronze Finish	2.00
1	No. 6OC—Excello, Oxidized Copper Finish	2.00
1	No. 6N —Excello, Nickel Finish	2.00
1	No. 6B —Excello, Lemon Brass Finish	2.00
1	No. 6S —Excello, Satin Silver Finish	2.00
1	No. 9C —Baby Call, Copper Finish	1.50
1	No. 9FB—Baby Call, French Bronze Finish	1.50
1	No. 9N —Baby Call, Nickel Finish	1.50
1	No. 9B —Baby Call, Lemon Brass Finish	1.50
1	No. 9S —Baby Call, Satin Silver Finish	1.50
1	No. 9C —Wizard, Nickel Finish	1.50
1	No. 9C —New Rival, Nickel Finish	1.50
1	No. 120 —Aerogram, Nickel Finish	.25
	Total Retail Value	$110.00

ANVILS

PARAGON

Paragon Anvils are Made of the Finest Quality Swedish Steel The Face and Body are One Piece, therefore no weld exists and the face never separates from the Body. The Face is of harder steel than the body and properly tempered.

BLACKSMITH

For General Forging Purposes

	Per Pound
No. 1P—Weight, Lbs., 70, 75, 80 and 85	$0.38
No. 2P—Weight, Lbs., 90, 100, 110, 120, 130, 140, 150, 160, 180, 200 230, 240, 250, 260, 300, 350 and 400	.36

HORSE SHOERS' CLIP HORN

Clip Horn facilitates the drawing of Clips and saves the Anvil Face Two Pritchel Holes at Heel; Narrow Face; Full Round Horn; Best Shape for Horseshoers.

	Per Pound
No. 3P—Weight, Lbs., 125, 130, 135, 140 and 150	$0.38

	Dimensions of Blacksmiths' Patterns										Clip Horn		
Weights Anvil, Lbs.	75	100	125	150	175	200	250	300	350	400	125	135	150
Face Size, In.	3⅜x12	3⅝x13	4⅛x14¼	4½x15¼	4⅝x15½	4¾x16½	5x17¾	5¼x19¾	5½x20½	5¾x21	3⅝x15½	3¾x16	4x16½
Height of Anvil, In.	8½	9¼	10	11	11¼	12¼	13¼	14	14¼	15	10	10½	11
Length of Horn, In.	7½	8	8¾	9¾	10	11	11½	12½	12¾	15	10¾	11½	12
Holes, Square, In.	¾	¾	⅞	⅞	1	1	1⅛	1¼	1¼	1¼	⅝	¾	⅞
Holes, Round, In.	½	⅝	⅝	⅝	⅝	⅝	⅝	¾	¾	¾	½	½	½

HARDIE HOLE LIST, APPROXIMATE

For Anvils, Lbs.	70 to 100	110 to 155	156 to 190	191 to 260	261 to 360	361 to 400
Size of Hole, In.	⅞	▒	1	1⅛	1¼	1⅜

ANVILS

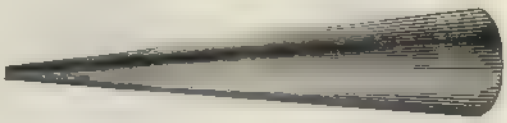
No. 4V—VULCAN

Solid Tool Steel Face, Thoroughly Welded to the Body of Anvil, Accurately Ground and Tempered, Horn is covered with and its Extremity made entirely of, Tough Untempered Steel, Body of Superior Pig Iron

Size Nos.	2	3	4	5	6	7	8	9	10	12
Wt Ea., Lbs	20	30	40	50	60	70	80	90	100	120
*Each.	$8.00	9.00	10.50	12.00	13.00	14.25	16.00	18.00	20.00	24.00

Open Stock

MANDRELS OR CONES

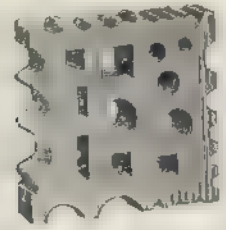


No. 5M—CAST IRON MANDRELS

Used in Forming Rings of All Kinds and Sizes

Size Nos.	Length In.	Diam., Bottom, In.	Diam., Top, In	Weight Lbs.	Per Pound
1½	40	10	1	90	$0.14
2	48	12	1	115	.14
3	52	14	1	165	.14

SWAGE BLOCKS

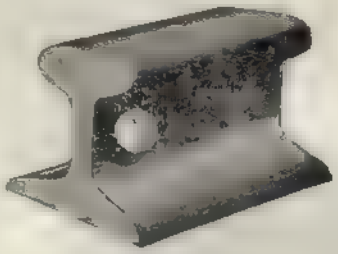


Used by Blacksmiths for Forming Iron to certain Square, Round or Oval Shapes; Use the Inside Holes for Upset Heads of Flatters, Hammers, etc.

	Per Lb
No. 1—12½x12½x3½ In.; Weight 100 Lbs	$0.14
No. 3—15 x15 x4 In.; Weight 150 Lbs	.14
No. 6—19½x19½x4½ In.; Weight 300 Lbs	.14

No. 6 Carried at Portland Only

RAIL ANVILS



RAIL ANVILS

For General Use by the Farmer, for Light Forging, Riveting, Sharpening Plow Shares, etc.

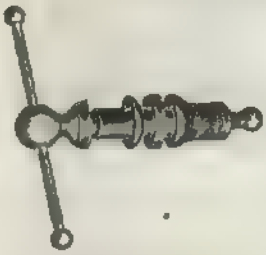
	Per Pound
No. 6R—Cut from 40 Lb. Steel Rail, Length 4 in.; ½ in. Hole	$0.12

Weight 53 Lbs. per Dozen

BLACKSMITHS' LEG VISES

Welded Tool Steel Jaws, Polished, File Cut, Properly Hardened; Easily Operated, Shape allows workman to get close to his work

Nos. and Weights	Width of Jaw and Opening In.	Each
35 Lbs.	4	$10.00
40 Lbs.	4	10.50
45 Lbs.	4¼	11.00
50 Lbs.	4¼	11.50
60 Lbs.	4½	13.00
70 Lbs.	5	15.00
80 Lbs.	5¼	17.50
90 Lbs.	5½	20.00
100 Lbs.	6	22.00
115 Lbs.	6¼	25.00
125 Lbs.	6½	27.50
150 Lbs.	7	36.00

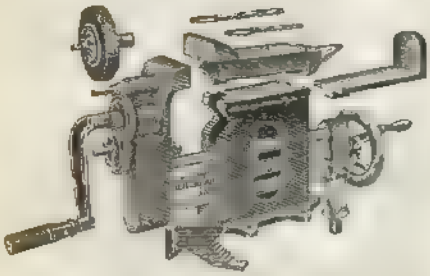


STEEL BOXES AND SCREWS

For Blacksmiths' Vises

Nos.	For Vises Lbs.	Diam. of Screw, In.	Weight Each, Lbs.	*Each
1	25 to 50	1⅛	8	$ 7.00
2	60 to 70	1¼	12	8.00
3	80 to 90	1⅜	14	9.00
4	100 to 125	1½	18	13.00
5	150 to 200	1¾	30	22.00

COMBINATION VISES AND ANVILS



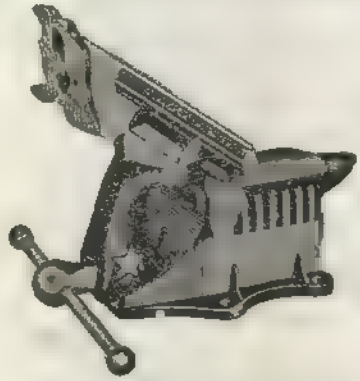
HANDY WORKER

For Machinists, Farmers, Garages, Repair Shops, Homes or Any Place Where Repair Work Is Done

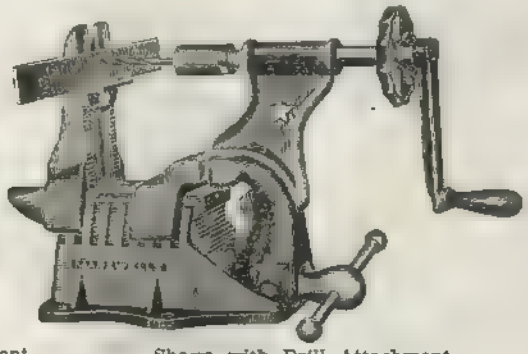
Each

No. 1915—This Tool comprises a Strong, Powerful Vise up to 4½ in.; Width of Jaws 4 in.; Cutting Hardie; Pipe Vise which takes up to 1½ in. Pipe; Drill Press which may be operated at Two Speeds; Anvil, Corundum Grinding Wheel, Size 5x1 in.; Three Speeds—Direct, 4 to 1 and 16 to 1.....$15.00

One in a Box; Weight 100 Lbs. Each



Shows with Saw Vise Attachment



Shows with Drill Attachment

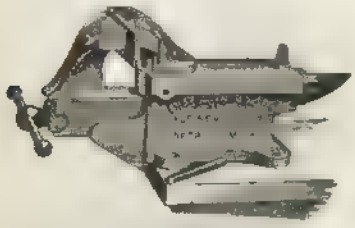
MARSWELLS

12 in. Extension Jaw Vise, Anvil and Pipe Holder

Cast Iron Body; ⅞ in. Solid Steel Screw; Jaws Faced with Hardened Steel; Face of Anvil Chilled, Ground and Polished; No Springs; Strengthening Ribs on Body; 4 in. Jaws, Body 17½ in. Long; Painted Red; The Drilling Attachment is adjustable and can be used on wood or metal; Has a separate Feed Screw with Fine Thread for Feeding Drills; Saw Vise Attachment fits on the larger Jaw of the Anvil, and will hold a Saw securely; Can be used for Woodwork; In repairing Harness, Binding Cheek Iron, etc.

Each

No. 5 —Without Attachments; Weight 50 Lbs. Each $5 50
No. 5S—With Saw Vise Attachment; Weight 55 Lbs. Each..... 6 50
No. 5D—With Drill Attachment; Weight 50 Lbs. Each 8 50



CHENEY

The Small Size is Adapted for Use of Jewelers, Amateurs, etc., the Larger Sizes for Householders, Mechanics, Farmers, Miners, etc.; Chilled Iron Anvil, Tempered Steel Faces; Jaw Adjustable to take odd Shaped Articles or may be Removed Entirely.

Nos.	10	20	30	40
Width Jaws, In.	2¼	3¼	3¾	4½
Jaws Open, In.	3	4	5	6
Size Face, In.	4½x2	6½x3	8x3½	8½x4
Weight Ea., Lbs.	12	30	41	55
Each	$7.00	9.00	11.00	13.00

One in a Crate

JULIEN

For General Repair Work; Will Take Small Size Pipe

Each

No. 100—Cast Iron Body; Jaws and Face Hardened and Polished; Size of Face 7x2¾ in.; Diam. of Screw ¾ in.; Width of Jaws 2¾ in.; Opens 6 in.....$3.50

Weight 20 Lbs. Each

AUSTIN

For Farmers, Repair Shops and Light Forging; Horn for Shaping Purposes

Each

No. 321—Wrought Iron Body; Polished Hardened Steel Face, Size 7x3 in.; Width of Jaws 3 in., Opens 4 in..$3.50

Weight 28 Lbs. Each

Open Stock

ARTIFICIAL BAITS

ORIENTAL WIGGLER

An "Al. Foss" Lure; Solid Celluloid Pork Rind Tail Minnow of White Color; Very light weight, only ⅜ Oz.; the particular wiggly action of this Bait makes it deadly to all game fish, especially Bass and Pike, Pork Rind Strip is attached by buttoning forward end to button and impaling on Hook; Can be used without Pork Rind Strip if desired, Bait is practically weedless as the Hook always rides upright, passing over weeds and other obstructions

Per Dozen

No. 330—White Celluloid, with No. 3-0 O'Shaughnessy Hook $12 00

One in an Attractively Lithographed, Tinned Box; 12 in a Carton

Weight 2 Lbs. per Dozen

MARSWELLS WOODEN FLOATING OR SURFACE BAITS

Size 2¾ in.

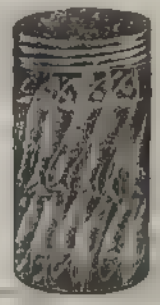
Head and Spinners are securely fastened together and revolve very freely on a Metal Bearing. The Spinner Blades have a peculiar twist which produces a "Churn" in the water which is so attractive and deadly to all game fish; Detachable Polished Aluminum Spinners, Nickel Plated Hooks and Connections; Heavily Coated with Indestructible Waterproof Porcelain Enamel.

Per Dozen

No. 492 White Enamel Over-all.....$6.00

Wrapped in Tissue Paper. One in a Box 12 Boxes in a Carton

PRESERVED MINNOWS



PERFECT

Put Up in Glass Jars

These are the Natural Minnows caught in cold swift water and put up in a preparation which preserves the Natural Appearance and at the same time toughens the flesh; They will keep indefinitely in the solution in which they are packed

Per Doz. Jars

No. 2—Mixed Sizes; About 125 to the Jar $4.00

No. 3—Large Size Minnows; About 100 to the Jar.....4.00

Two Dozen Jars in a Case
Weight 45 Lbs per Case

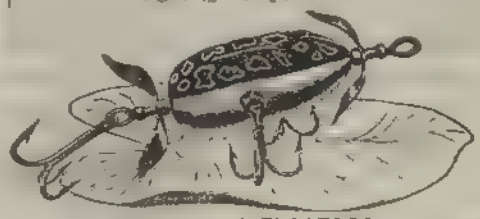
LITTLE EGYPT WIGGLER

This "Al. Foss" Bait is very light weight, only ⅜ Oz., but can be cast just as easily as a heavier Bait; Made of Brass, Heavily Nickel Plated; a very successful Lure for all game fish, especially Bass and Pike; Pork Rind Strip is clamped as illustrated and end impaled on Hook; Practically weedless.

Per Dozen

No. 333—With No 3-0 O'Shaughnessy Hook $9 00

Weight ½ Lb per Dozen



MARSWELLS FLOATERS

This Bait is designed to supply a demand for Light Surface Casting; in shape and decoration, it closely resembles a frog; Recognized as being the most effective Bait for game fish and will catch Bass where others fail

Per Dozen

No. 481—Length of Body 2 in.; Made of Light Wood; Spotted Green Back, blending to White Belly; Nickel Spinner at Head and Tail; Glass Eyes; Three Nickel Plated Treble Hooks, one at each side and one at end $7 20

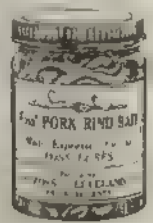
One in a Box, One Dozen in a Carton
Weight 1 Lb. per Dozen

PORK RIND BAIT

Per Doz. Boxes

No. 15P—Six Minnow Shape Strips in Metal Box; Cut thin with the Rind on each piece, especially cured, lasting and tough; a great Bass, Pike and Pickerel Lure when used with a Spoon $3.00

One Dozen Boxes in a Carton
Weight 6 Lbs. per Dozen



"AL. FOSS" PORK RIND STRIPS

Per Doz. Bottles

No. 337—Designed especially for Foss Lures; They are thin and flexible, Free from grease, yet very lasting and will keep indefinitely; Can also be used on other makes of Baits .$4 00

Twelve Strips in Bottle; One Dozen Bottles in a Case; Weight 6 Lbs. per Dozen

THE SKIDDER

This "Al. Foss" Lure is very light, being less than ½ Oz.; With Pork Rind Strip it is a successful Bait for game fish, especially Bass and Pike and is practically weedless.

Per Dozen

No. 336—With No. 3-0 O'Shaughnessy Hook $9.00

Weight 1¼ Lbs. per Dozen

PRESERVED FROGS

MEDIUM SIZE

For Bait Casting; Preserved in such a manner that they are slightly elastic and yet are toughened so the Bait is very lasting; Will keep indefinitely if not removed from pickle and exposed to the air.

Per Dozen Jars

No. 17F—Right in Glass Jar, with Screw Top $4.00

One Dozen Jars in a Case
Weight 11 Lbs. per Dozen Jars

PORK RIND BAIT

MARSWELLS

This Pork is special cured, to be tough and lasting, yet soft and pliable, to give the Minnow Tail Wiggle; the secret of its great success for Pike, Bass, Pickerel and all game fish; Cut the way a practical fisherman wants it.

Per Doz Bottles

No. 10—Gives the Live Minnow Wiggle, Life and Animation to any Spoon, Fly or Buck Tail.....$4.00

Weight 11 Lbs. per Dozen Bottles

WOODEN MINNOWS

For Casting or Trolling for Bass, Pike, Pickerel, Perch, Muskallonge, Etc.

MARSWELLS

Body made of Selected Cedar; the method of attaching Hooks allows them to be instantly detached, if accidently broken, by running through Head Piece; the Hood Sockets always hold the Hooks outwardly so that the Points are always presented to the fish. Hooks cannot become entangled nor mar the enamel on the Body. Large Glass Eyes; Minnows are correctly weighted so they will always float in an upright position. No Swivels are necessary as Bodies will not revolve; Spinners revolve in opposite directions.

2¾ in. Body; 2 Spinners and 3 Treble Hooks

	Per Dozen
No. 350—Green Back, White Belly	$6 00
No. 351—Yellow Perch	6.00
No. 352—Rainbow Back, White Belly	6.00
No. 303—Solid White	6 00
No. 304—Slate Back, White Belly	6 00
No. 305—Fancy Back, Yellow Belly	6 00

Weight 2¾ Lbs. per Dozen

3⅝ in. Body; 2 Spinners and 5 Treble Hooks

	Per Dozen
No. 460—Green Back, White Belly	$7.20
No. 461—Yellow Perch	7.20
No. 462—Rainbow Back, White Belly	7.20
No. 463—Solid White	7.20
No. 464—Slate Back; White Belly	7.20
No. 465—Fancy Back, Yellow Body	7.20

Weight 3 Lbs. per Dozen

WATERWITCH

Clear Air Dried Birch, Shaped and Ballasted, always keeping Minnow in proper position; Large Glass Eyes; Right and Left Spinners revolve in Opposite Directions.

2¾ in. Body; 2 Spinners and 3 Treble Hooks

	Per Dozen
No. 270—Solid White	$3 00
No. 271—Red Back, White Belly	3.00
No. 272—Green Back, White Belly	3.00

Weight 2¾ Lbs. per Dozen

3⅝ in. Body; 2 Spinners and 5 Treble Hooks

	Per Dozen
No. 280—Solid White	$4.80
No. 281—Red Back, White Belly	4.80
No. 282—Green Back, White Belly	4.80

Weight 3 Lbs. per Dozen

WOODEN MINNOW ASSORTMENTS

LITTLE JOE

Per Dozen

No. 16—2½ in. Body; Three No. 1 Spear, Treble Hooks. Bodies heavily White Enameled with assorted Red and Green Backs $2 40

One Dozen on a 12x12 in. Display Card

Weight 2 Lbs. per Dozen

Note—We will not sell less than Full Assortments

DECOY OR ICE MINNOWS

Per Dozen

No. 72—For use in Spearing Fish through ice, Made of Selected Cedar, chemically prepared to prevent absorption of water; Weighted and Trimmed so it will dart diagonally downward in circles; This motion is kept up by slight pulling of line fastened in screw eye on back of Decoy; Length 6¾ in. $15.00

One in a Box; Weight 2 Lbs. Dozen

CATCH-ALL FLEXIBLE MINNOWS

Fine Quality Oiled Waterproof Silk Body, White Gut Leader, Brass Box Swivel, Assorted Colors

No. 70—With Two Spear Point Bronze Treble Hooks

Size Nos.	3	4	5
Length, In.	2	2¼	2½
Per Dozen	$6.00	6.75	7.50

No. 71—With One Spear Point Bronze Treble Hooks

Size Nos.	0	1	2
Length, In.	1	1½	1¾
Per Dozen	$4 50	5.00	5 50

One in a Box; ½ Doz. in Transparent Covered Carton

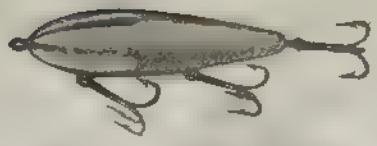
PHANTOM MINNOWS

No. 72—Made of Silk, Shaped and Finished in Assorted Colors, true to nature; has Three Treble Hooks, attached with Heavy Strands of Gut; Brass Box Swivel for fastening to Line.

Size Nos.	2	3	4	5	6	7	8
Length Body, In.	2⅛	2¾	3¼	3⅝	3⅞	4⅛	4⅝
Side Hooks, Size Nos	9	8	7	6	5	3	2
Tail Hooks, Size Nos.	8	7	6	5	4	2	1-0
Per Dozen	$6 50	6.50	8 50	6 50	7.20	8.50	10 00

One in a Box; Six in a Display Box; Weight about ¾ Lbs. per Doz.

ARTIFICIAL WOBBLER BAITS



WILSON FLUTED WOBBLER

The peculiar fluting on the Bait gives it a wiggling, darting movement; Exactly imitating an escaping or wounded minnow; a proven successful lure for all game fish, especially Bass and Pike; At regular speed of reeling the Bait travels about 14 in. under surface, sinking lower as line is reeled faster and rising as line is reeled slower; Floats when not in motion; Selected Cedar Body, 4¼ in. Long; Finished with Improved Enamel, with Three Bronzed Treble Hooks.

	Per Dozen
No. 11W White Body, Red Flutes	$9.00
No. 12W—Yellow Body, Red Flutes	9.00
No. 13W—Red Body, Red Flutes	9 00

One in a Box; One Dozen in a Carton

Weight 2 Lbs. per Dozen

WILSON FLUTED WOBBLER

Small Size; for fishermen who prefer to use a light weight outfit

Junior size of the popular Wilson Wobbler; It's all in the Flutes; the peculiar fluting on the Bait gives it a wobbling and darting movement which is irresistable to all game fish, At the average speed of reeling the Bait travels about 14 in. under the surface; Floats when not in motion; Bait is 3½ in. Long and Weighs but ¾ of an Oz.; Equipped with Two Treble Hooks.

	Per Dozen
No. 11FS White Body, Red Flutes	$9 00

One in a Box; One Dozen in a Carton

Weight 1½ Lbs. per Dozen

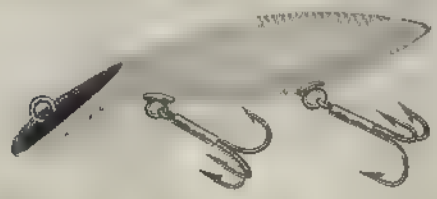
WILSON SIX-IN-ONE WOBBLER

This new Wilson Wobbler is equipped with an **Adjustable Diving Guide** which may be instantly set and changed to any one of six different positions; One position will cause Bait to skim on surface of water and other position will cause it to travel at various depths and with various wobbling movements; the Adjustable Guide is very desirable for frequent changes can be made quickly and without loosening the line; Floats when not in motion; Wood Body 4 in. Long, with two Treble Hooks.

	Per Dozen
No. W1S—White Enamel, with Red Head	$9.00
No. W4S—Solid Red Enamel	9.00
No. W5S—Yellow Enamel, with Red Head	9.00
No. W6S—Silver Enamel, with Red Head	9.00
No. W3S -Perch Coloring Enamel	9.00
No. W12S—Red Striped on Green Back, with White Belly Enamel	9.00

One in a Box; One Dozen in a Carton

Weight 2 Lbs. per Dozen



RUSH TANGO

A high grade Wobbler and a proven successful Bait for casting and trolling; a deadly killer for all kinds of game fish; Has all the life-like swimming motion of a minnow in action; It darts and dives in various directions, always wiggling, always lively; When not in action the Bait floats, thereby avoiding any possibility of catching on the bottom; the Hooks being behind the Body of Bait, makes it practically weedless; Finished in Brilliant Colors in High Grade Baked Enamel; Length 5 in

	Per Dozen
No. 1T—White "Radiant" Bait; Glows at night	$9.00
No. 2T—White Body, with Red Head	9.00
No. 4T—White Body, with Red and Green Mottled Back	9.00
No. 5T—Yellow Body, with Red Head	9 00
No. 6T Yellow Body, with Red and Green Mottled Back	9.00
No. 8T—Red Body, with White Head	9.00

One in a Box; One Dozen in a Display Case

Weight 1⅝ Lbs. per Dozen

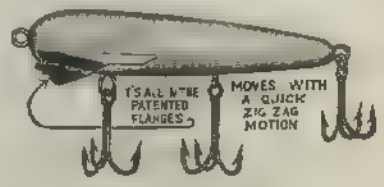
RUSH TANGO JUNIOR

This Bait is the same as Rush's Tango, but is of a smaller size, measuring 4¼ in. Long; It has the same action as the Tango and is a great killer for all game fish, especially Brass and Pike.

	Per Dozen
No. 2JT—White Body, with Red Head	$9.00
No. 4JT—White Body, with Red and Green Mottled Back	9.00
No. 5JT—Yellow Body, with Red Head	9.00
No. 6JT—Yellow Body, with Red and Green Mottled Back	9.00
No. 8JT—Red Body, with White Head	9.00

One in a Box; One Dozen in a Display Case

Weight 1¼ Lbs. per Dozen



WILSON WINGED WOBBLER

The Wings on this Bait give it a quick zig-zag motion through the water and also make the Bait weedless to a certain extent. This Bait will Float while resting on the water, yet will travel to a depth of six feet upon being reeled in; It is a sure killer for Bass and Pickerel.

	Per Dozen
No. 2—White Enamel Body; Bright Red Flanges	$9.00

One in a Box; One Dozen Boxes in a Carton

Weight 2¼ Lbs. per Dozen

RUSH TANGO MIDGET

The Midget has all the effective, life-like action of the Rush Tango and is sure to attract game fish as it wiggles its way through the water, making a big wake; This gives the Bait great killing qualities; An ideal Bait for casting in shallow water or when the fish are feeding on the surface; Weight less than ½ Oz.; Measures 2½ in. Long, When not in motion the Bait comes to the surface, thereby avoiding possibility of snagging or tangling of line; the Hooks being behind the Body of Bait makes it practically weedless; Just a nice mouthful for a big Bass.

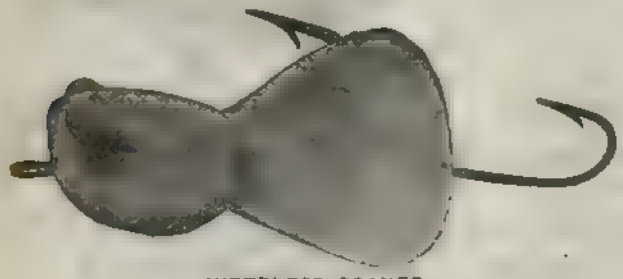
	Per Dozen
No. 2MS—White Body, with Red Head	$9 00
No. 3MS—White Body, with Yellow and Green Mottled Back	9.00
No. 5MS—Yellow Body, with Red Head	9 00

One in a Box; One Dozen in a Display Case

Weight 1 Lb. per Dozen

COAXER BAITS

These Baits are Brilliant in Color, Lively in Action and have a life like appearance and action while in the water; They are practically weedless and will pass through rushes and over floating weeds and drift without snagging; the Tail gives good side protection; the blunt front end causes it to throw a good spray, giving life like action; the large, deep Hook cannot twist off, has nothing to break, catch weeds or get out of order.



WEEDLESS COAXER

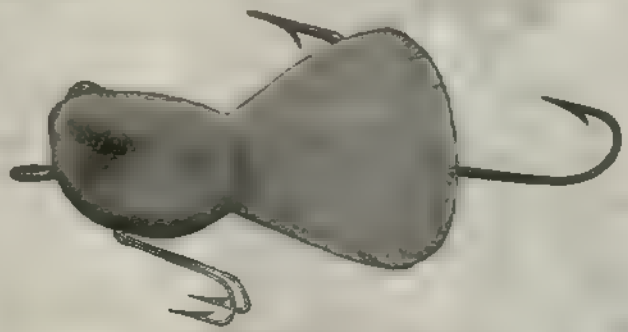
A Floating Bait for Bass and Pickerel

Easy to cast and can be used for skittering and trolling also, a good killer and humane.

White Enameled Cork Body; Red Felt Wings and Brilliant Red Feathered Tail; Hooks of proper size, protected by the Wings and Body.

	Per Dozen
No. 1—Length of Body 1⅞ in.	$7.20
No. 2—Length of Body 1⅝ in.	7.20
No. 3—Length of Body 1¾ in.	7.20

One in a Box



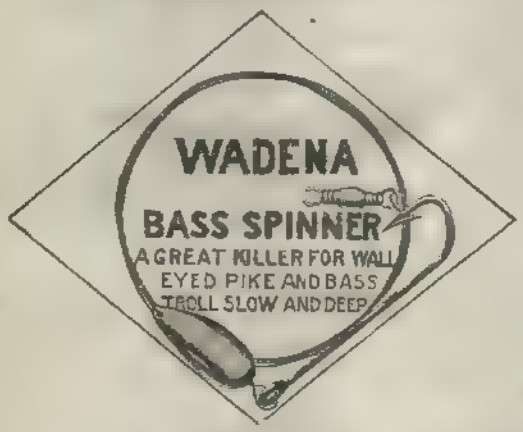
CONVERTIBLE COAXER

Same as the Weedless, except has a Removable Double Hook attached to the bottom; a Bass striking this Bait has little chance to escape; when fishing in weedy water remove the bottom Hooks, can be used for Casting, Skittering or Trolling.

	Per Dozen
No. 1C—Length of Body 1⅞ in.	$9.00
No. 2C—Length of Body 1⅝ in.	9.00
No. 3C—Length of Body 1¾ in.	9.00

One in a Box

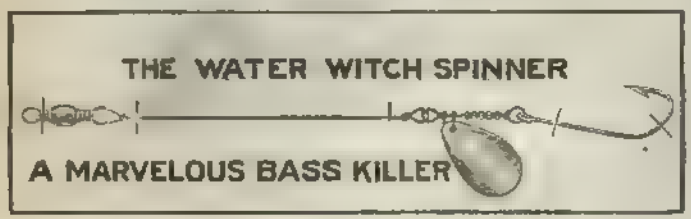
SPINNER BAITS



WADENA

	Per Dozen
No. 3W—Size of Spoon 1¼x⅝ in., Gold Plated and Red Enameled on Inside; Mounted on 3 ft. Steel Piano Wire, with Brass Barrel Swivel; No. 2/0 Bronzed, Extra Strong Carlisle Hook with Baiting Wire; Weight 9 Oz. per Dozen.	$3.00

One on a Card; One Dozen in a Box



WATER WITCH

Positively the Best Bass, Pike and Pickerel Bait made; use Live Minnows, Small Frogs or a small strip of Pork Rind.

	Per Dozen
No. 1W—Nickel Plated Spoon, Size ⅞x⅞ in.; Bright Steel Piano Wire Leader, 4 in. Long; Brass Barrel Swivel; Nickel Plated, Hollow Pointed Cincinnati Bass Hook, No 18; Weight 6 Oz. per Dozen	$3.50
No. 2W—With Weedless Attachment; a Positive Guard against Snagging Hook on Weeds, etc.; Weight 7 Oz. per Dozen.	4.00

One on a Card; One Dozen in a Box

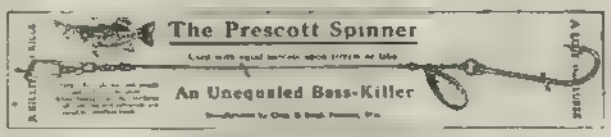
COAXER FLOATING BASS FLIES

Will not sink in either swift or still water; has very life like action; will keep its shape almost indefinitely and will not water log.

	Per Dozen
No. 5—Made in 12 Assorted Patterns and Colors of Enameled Cork and Feathers on a No. 2-0 Special Hollow Point Hook.	$6.00

One in a Box

SPINNER BAITS



GENUINE PRESCOTT

An unequaled Game Fish Getter, especially pike and bass; Used for casting, still fishing or trolling in deep or shallow water; Can be used without any Bait, but is very effective with Minnows, Frogs, Pork Rind, etc.

	Per Dozen
No. P10—Nickel Plated Spinner; Size ⅞x⅝ in.; Non-Rusting Wire Leader, 6½ in. Long; Equipped with Swivel and Snap which prevents Line Twisting and makes attaching to Line or Sinker very simple; Hollow Pointed, Cincinnati Bass Hook, Size 17	$3.75

Weight 7 Oz. per Dozen

	Per Dozen
No. PW15—With Weed Guard; a sure protection against Weeds, Snags, etc., otherwise same as No. P10	$4.25

Weight 7 Oz. per Dozen

One on a Card; One Dozen in a Package

AUTOMOBILE CLOCKS

Will successfully resist the jolting, jarring and steady vibration of a Car in motion. They are guaranteed to keep perfect time under the most trying conditions; the Movement has been greatly simplified, and all parts are made of Hard Brass and Highly Tempered Steel, insuring greater stability and better time-keeping; All Clocks are closely tested in the Factory under conditions similar to those encountered in actual service; the first three Clocks are wound and set by turning the Rim; No Key is required.

KEYLESS; COWL

Rim Wind and Rim Set

The Rim has knurled edges to facilitate easy winding and setting

Each

No. 9—Eight Day Time; Gun Metal Case, Nickel Plated Rim; 2¾ in. White Dial with Black Numbers and Markings, Diam. of Case 3 in., Depth 2½ in.; Diam. over Flange 4 in.; With Second Hand.....$13.00

One in a Box, with Screws
Weight 2 Lbs Each

KEYLESS; COWL

Rim Wind and Rim Set

The Rim has knurled edges to facilitate easy winding and setting

Each

No. 12—Eight Day Time; Gun Metal Case, Nickel Plated Rim; 2¼ in. White Dial with Black Numbers and Markings; Diam. of Case 2½ in., Depth 2 in.; Diam. over Flange 3½ in. $11.75

One in a Box, with Screws
Weight 1¾ Lbs. Each

KEYLESS, OFFSET

Rim Wind and Rim Set

The Rim has knurled edges to facilitate easy winding and setting

Each

No. 105—Eight Day Time; Gun Metal Case, Nickel Plated Rim; 2¼ in White Dial with Black Numbers and Markings; Diam. of Case 3 in., Depth 3 in.; With Second Hand .$10 50

One in a Box, with Screws
Weight 1½ Lbs. Each

REAR WIND AND REAR SET

To Wind or Set, Remove Clock from Case

Each

No. 2—One Day Time; Nickel Plated Case; 2¼ in White Dial with Black Figures and Markings; Diam. of Case 2⅛ in., Depth 1¾ in., Diam over Flange 3⅝ in..... $3 25

One in a Box with Screws
Weight 1¼ Lbs Each

KEY WIND, COWL

Key Wind and Set

Each

No. 371—Eight Day Time; Nickel Plated Case; 2¼ in. White Dial with Black Figures and Markings; Diam. of Case 2½ in., Depth 1½ in.; Diam. of Flange 3⅛ in; With Second Hand $6 00

One in a Box, with Screws
Weight 3 Lbs Each

KEY WIND OFFSET

Key Wind and Set

Each

No. 370—Eight Day Time; Nickel Plated Case 2¾ in. White Dial with Black Figures and Markings, Diam of Case 3⅜ in Depth 2¼ in. Diam over Flange 4 in.; No Locking Plate; With Second Hand.....$5 50

One in a Box, with Screws
Weight 2 Lbs Each

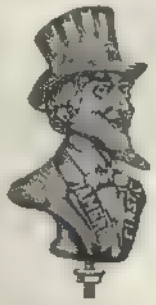
STEM WIND AND STEM SET

Each

No. 350—One Day Time; Gun Metal Case; Nickel Plated Rim; 1⅞ in White Dial with Black Figures and Markings; Diam. of Case 2⅛ in., Depth ⅝ in.; With Bracket for Steering Wheel of Ford or Dodge Cars $3 50

One in a Box
Weight ½ Lb. Each

AUTO ORNAMENTS OR RADIATOR EMBLEMS



UNCLE SAM

Each

No. 8056—Height 6 in., Width 4 in., Nickel or Gold Finishes, with Colored Enamel Design.....$2.70

One in a Box; Weight 2 Lbs. Each

AMERICA FIRST

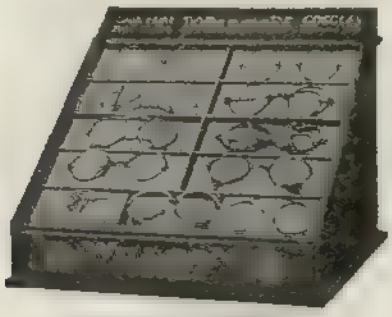
Each

No. 8006—Height 3½ in., Width 5 in., Nickel or Gold Finishes, with Colored Enamel Design.....$2.00

One Dozen in Box; Weight 6 Lbs. per Dozen

GOGGLES OR EYE SHIELDS

Sightly, Easy Fitting, Properly Ventilated, Perfect Protection; Used by Automobilists, Motorcyclists, Locomotive Engineers and Firemen, Teamsters, Machinists over Lathe, Polishing or Grinding Work, etc.



GOGGLE ASSORTMENT

Assortment is contained in a Mahogany Finished Display Case, Size 13¾x15¼x12¾ in., a sample of each Goggle is prominently displayed under the Glass; They range in price from 25 cents to $1 50 per Pair; There is ample space in the Case for stock; Instructions to help the clerk sell and fit Goggles are included. Per Assortment

No. 1—Assortment Contains 40 Pairs of Goggles, all good sellers as listed below, 11 Styles.....$30.50

Weight 23 Lbs per Assortment

Display Case Contains the Following

Pairs		Prices to Retail Dealers Doz.	Total	Selling Prices to Consumers Pair	Total
7	No. 72594..	$2.00	$1 17	$0.25	$1 75
3	No. Z79594..	4.00	1.00	.75	2.25
6	Universal...	4.00	2.00	.75	4 50
6	No K7 .	4 50	2.25	.75	4 50
3	No A1	6 75	1 69	1.00	3 00
2	No K1	6.75	1.13	1 00	2.00
3	No Z21W .	5 25	1.31	1.00	3 00
2	No Z1W ..	7 50	1.25	1.25	2 50
2	No ZF1W .	9.00	1 50	1.50	3 00
2	No. Z5	6 75	1 13	1.00	2 00
4	No Z9659..	3 00	1 00	.50	2 00
			$15 43		$30 50
Handsome Show Case Displaying 11 Styles			2.50		
Total Value $17.93					

DIM-A GLARE GOGGLES

Per Dozen

No. 400—By lowering the gaze and looking through the dimmer portion of the Goggle, the blinding glare from approaching cars is done away with; When worn in the day time they protect the eyes from sun glare and soften the light without obstructing the vision.....$5 00

REGULAR GOGGLES Per Dozen

No. 500—Made from a Transparent, Flexible Material which will bend, but will not break.....$4 00

One Dozen Assorted Colors in a Handsome Display Case; Weight ¾ Lb per Dozen

WELDING Per Dozen

No. 413—**Large Eye;** Non-Corrosive White Metal Frame, with White Metal Side Shields; Soft, Flexible Cable Bows, Dark Actinetic Lenses, 1⅛ in. Diam.; for Welding purposes $15 00

One in a Case; Weight 2½ Lbs. per Dozen

Per Dozen

No. 3060—Zylonite Frame and Bows, Large Amber Colored Lens, Broad Easy Fitting Bridge; Light and Strong $20 00

One in a Metal Case with Hinged Cover Weight 2½ Lbs per Dozen

Per Dozen

No. 7213—Clear Glass Lenses, 2x2⅝ in.; Aluminum Cup Protectors, Leather Lined, Chenille Bound, Adjustable Head Band and Buckle..$10 00

One in a Box; Weight 2 Lbs. per Dozen

ACTINETIC LENS GOGGLES

The Lenses in these Goggles shut off a greater amount of irritating rays and admit more light than ordinary Protectors; After wearing one a few minutes the color apparently disappears and the wearer has the advantage of looking through a colorless lens; the Frames are made of Zycalite, which is the best known reproduction of Tortoise Shell; They have great ductile strength and take a fine finish, They are very comfortable to the wearer

Each

No. 46—Drop Eye; Large Amber Lenses, 1⅝ in Diam ; Shell Colored Frame.$1.50

Each

No. 46R—Round Eye; Large Actinetic Lenses, 1⅛ in. Diam.; Slip over Crystal Color Frames, constructed so they can be worn over regular Glasses $3 00

Each

No. 50—Extra Large Round Eye; Actinetic Lenses, 2⅛ in. Diam.; Royal Blue Colored Frame.....$3.50

No. 50P—Pyralin Ivory Colored Frame,... otherwise same as above 3.00

No. 43—Medium Size; Round Actinetic Lenses, 1⅞ in Diam.; Crystal Color Shell Frame 1 25

One in a Case; Weight 2 Lbs per Dozen

BERKSHIRE

Lenses equipped with Round Aluminum Cup Protectors, 1⅞ in. in. Diam.; Set in Good Quality Leather, Assorted Drab, Mottled and Tank Masks; Length of Mask 8 in., Width 3 in., with ⅜ in. Plush Bound Edges, Fitted with Elastic Band.

Nos.	200C	200S
Color Glass	Clear	Smoked
Per Dozen	$4 50	4 50

One Dozen in Box; Weight 1 Lb. per Dozen

PENNSYLVANIA DUST

Per Dozen

No. 75—Lenses are equipped with Round Nickel Plated Brass Cup Protectors, 1⅛ in. Diam ; Set in Medium Weight Leather Mask; Length of Mask 3¼ in., Width of Mask 2⅝ in.; Fitted with Elastic Band.....$1 70

One Dozen in Box; Weight 1 Lb. per Dozen

WEAREVER

Per Dozen

No. 30380—Large Reversible Clear Lenses; 2⅝x2⅛ in. Rubber Cup Protectors; Soft Red Rubber Mask, Adjustable Elastic Head Band...$10.00

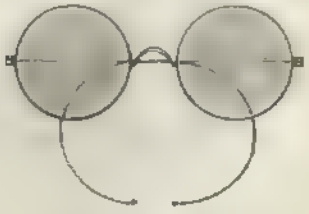
One in a Box; Weight 2 Lbs. per Dozen

Per Dozen

No. 542—Celluloid Frame; Gold Plated Ribbed Wire Cable Bows; Large Amber Colored Lens; Broad, Easy Fitting Bridge; Competition Grade $8.00

One in a Cardboard Box

Weight 2 Lbs per Dozen



EYE PROTECTORS

White Metal Riding Bows

Clamped Joints; Substantial Patented Construction; Large Round Lenses 2 in. in Diam.; Complete with Open End Case

Per Dozen

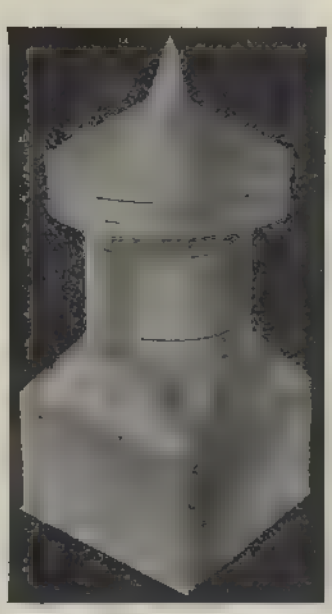
No. 2595C—Clear Lenses $3 50

No. 2595S—Smoked Lenses 3.80

No. 2595A—Amber Lenses 3.80

One in a Case; Weight 2 Lbs. per Dozen

BARN VENTILATORS



ECONOMY VENTILATORS

These Ventilators are made of Heavy Gauge Steel and are Strong, Durable, Efficient and Economical; They are Storm-Proof without interfering in any way with their ventilating capacity.

Estimated Capacities

18 in.—Capacity 7 Horses or 8 Cows

24 in.—Capacity 16 Horses or 20 Cows

30 in.—Capacity 24 Horses or 30 Cows

PLAIN TOP

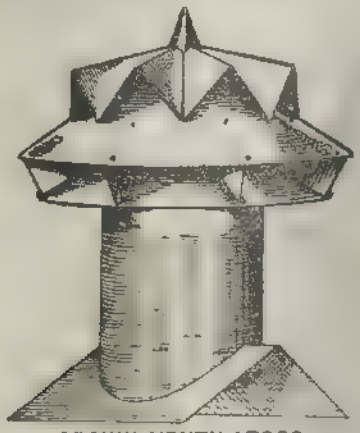
We call especial attention to the Appearance of this Ventilator and to the way in which it is constructed

	Each
No. 18P—Diam., 18 in.; Weight 40 Lbs. Each	$13.50
No. 24P—Diam., 24 in.; Weight 80 Lbs. Each	20.00
No. 30P—Diam., 30 in.; Weight 150 Lbs. Each	35.00

GLASS TOP

The Glass Top is very thick and is reinforced with wire which is made inside the Glass; it serves to light up the Barn or Loft

	Each
No. 18G—Diam., 18 in.; Weight 60 Lbs. Each	$15.00
No. 24G—Diam., 24 in.; Weight 100 Lbs. Each	25.00
No. 30G—Diam., 30 in.; Weight 180 Lbs. Each	40.00

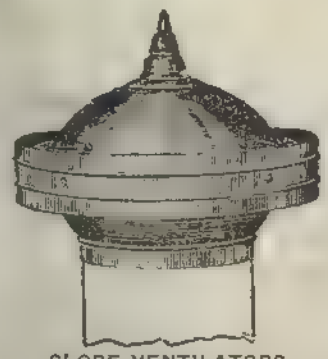


CROWN VENTILATORS

Works equally well on Calm or very Windy Days; Partitions are so arranged that the air passes through and out the opposite side, from any direction, thus providing a supply of Pure Air at all times.

When ordering, state if ventilator is wanted complete with full length pipe and roof saddle ready for installation. If so give pitch of roof and state whether it is to go on peak or side of roof. Also if damper is wanted.

Size, In. Dia.	Cap. Sq. In.	387M Top, Only	387P Pipe & Saddle	387R Damper	Weight Complete
8	50	$ 4.65	2.60	.60	12 Lbs.
10	79	5.75	3.30	.60	16 Lbs.
12	113	6.75	4.00	.60	19 Lbs.
14	154	13.00	4.50	.60	24 Lbs
16	201	20.00	4.80	.80	29 Lbs.
18	255	27.00	5.10	.80	45 Lbs.
20	314	33.00	5.80	.80	53 Lbs.
24	452	40.00	7.50	.80	90 Lbs.
30	707	65.00	11.00	1.20	146 Lbs.
36	1018	120.00	16.50	3.00	222 Lbs.
42	1257	180.00	25.70	3.00	313 Lbs.
48	1810	240.00	34.50	4.00	575 Lbs.
60	4072	360.00	51.00	6.00	1080 Lbs.



GLOBE VENTILATORS

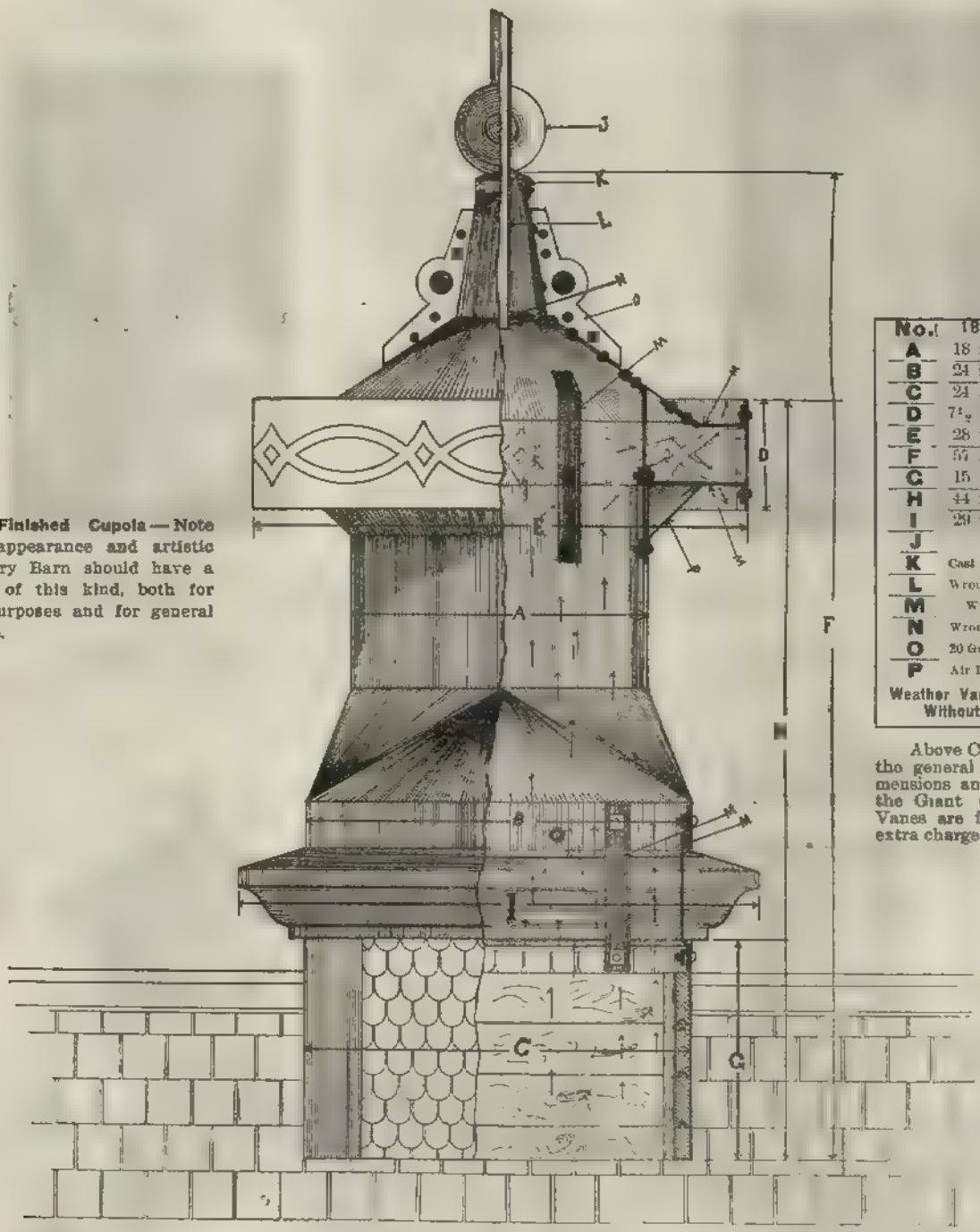
Made of Galvanized Steel, Strongly Riveted and Jointed; Size is Measured by Diameter of Pipe Collar

Size In.	Capacity Square In.	Cubic Ft. Exhaust Per Hour	No. 387E Top only Each	No. 387H Saddle Each	No. 387K Damper Each	No. 387L Pipe Per Ft.	Wt. C'plete Lbs.
6	20	3,215	$ 2.00	1 88	20	46	13½
8	51	5,740	2.10	2 26	64	.60	20
10	79	8,950	2.60	2 76	.76	.76	25
12	113	12,970	3.12	3.50	.88	.82	29
14	154	18,800	4.80	4.38	1.00	.88	37
16	201	23,050	7.20	5.36	1.16	1.00	44
18	255	29,250	8.64	6.26	1.38	1.38	53
20	314	35,990	12.00	7.12	1.76	1.50	70
24	453	51,935	15.60	8.76	2.12	2.00	96
26	527	59,730	19.20	9.38	2.26	2.82	127
28	616	70,500	24.00	10.00	2.46	3.10	143
30	707	81,050	26.50	11.88	2.88	3.26	153
36	1018	116,575	43.20	14.38	3.76	3.50	235
42	1620	185,690	67.20	17.50	4.24	4.12	345
48	1810	207,350	76.80	21.26	6.88	4.80	404
60	2828	321,750	115 20	33.76	11.88	7.26	876
64	3280	396,140	129 60	45.00	16.00	8.00	675
72	4072	466,525	144.00	52.50	17.50	10.00	845

Prices on Saddles Include 1 Ft. of Pipe

All, F. O. B. Duluth

GIANT CUPOLA OR BARN VENTILATOR



Shows Finished Cupola—Note the nice appearance and artistic lines: Every Barn should have a Ventilator of this kind, both for sanitary purposes and for general appearance.

No.	180	240	300
A	18 in.	24 in.	30 in.
B	24 in.	32 in	39 in.
C	24 in.	32 in	39 in.
D	7½ in.	8½ in	13 in.
E	28 in.	40 in	52 in.
F	57 in.	71 in	84 in.
G	15 in.	20 in	25 in.
H	44 in.	54 in.	65 in.
I	29 in.	37 in	45 in.
J	Zinc Ball		
K	Cast Iron Cap Connection		
L	Wrought Iron Pipe Braces		
M	Wrought Iron Braces		
N	Wrought Iron floor Flange		
O	20 Gauge Gal. Iron Braces		
P	Air Deflector wind Shield		

Weather Vanes are Furnished Without Extra Charge

Above Chart explains fully the general arrangement, dimensions and construction of the Giant Cupola: Weather Vanes are furnished without extra charge.

Made in Three Sizes most adaptable for use for Cow, Horse, Sheep or Swine Barns and for Hay Lofts

These Ventilators are absolutely storm proof, and still retain full efficiency in their ventilating properties.

Constructed with heavy anchors and braces which reinforce the body, also with shields, making it absolutely bird-proof.

This Ventilator is artistic and pleasing in appearance and adds attractiveness to your barn or house.

Each Ventilator is thoroughly protected by a galvanized bird-proof netting.

The Giant Ventilator has no revolving hood or other apparatus which will take continual attention to keep in order. They are built on strictly scientific lines and principles and are thoroughly tried out and proved as to points of efficiency.

You are offered here a Ventilator that ventilates.

Weather Vanes are made of anti-rust material, all thoroughly braced and properly fastened.

We will also supply a zinc model of any animal that may be selected for the weather vane.

	Each
No. 180—18 In. Diameter; has an estimated capacity for 7 Horses or 8 Cows; Weight 75 Lbs. Each	$36.00
No. 240—24 In. Diameter; has an estimated capacity for 16 Horses or 20 Cows; Weight 115 Lbs. Each	45.00
No. 300—30 In. Diameter; has an estimated capacity for 24 Horses or 30 Cows; Weight 175 Lbs. Each	54.00

GAS LAMPS

SOLAR BICYCLE LAMPS

Cannot Jar or Blow Out and throws a Clear Light 100 feet ahead; has an Adjustable Bracket and a Straight Carbide Cup with False Bottom for Ease in Cleaning; Adjustable to Head or Fork.

Each

No. 1—Heavy Stamped Brass, Nickel Plated; 7 in. High; 2½ in. Double Convex Front Lens; 1½ in. Ruby and Green Side Lights; Lava Tip; Uses Lump Carbide and Burns 6 Hours with One Filling $4.00

One in a Box; Weight 2 Lbs. Each

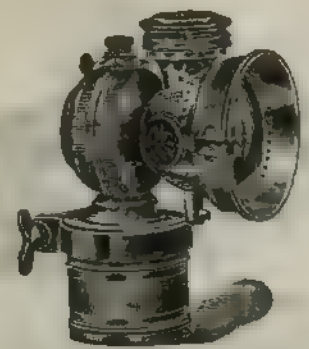
SEARCH LIGHT BICYCLE LAMPS

Absolutely Automatic in action; the Gas is generated only as it is used: the Carbide is contained in a telescopic compartment in the lower part of the Lamp, the Water Tube passes through the center of the compartment to feed the Water supply at the bottom of the Carbide; the flow of the water is regulated by a small Lever at the Top; has no complicated parts; no Tools required.

Each

No. 3—Made of Brass, Nickel Plated; 7 in. High; complete with Universal Bracket to attach to either the Head or Fork of Bicycle..... $4.00

One in a Box; Weight 3 Lbs. Each



20TH CENTURY BICYCLE LAMPS

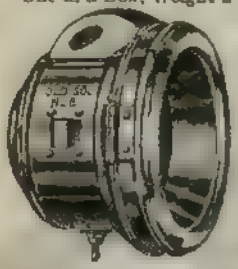
Adjustable Bracket Holds Lamp Rigid and throws Light at any Desired Angle: Fastens to Either Head or Fork.

Each

No. 2—Made of Brass, Nickel Plated; Aluminum Reflector; 7 in. High; 3½ in. Front Reflector; 2¾ in. Convex Lens; Red and Green Side Lights; Lava Tip; Uses Lump Carbide and Burns from 5 to 6 Hours with One Filling.... $4.00

One in a Box; Weight 2¼ Lbs. Each

Full Directions Packed with Each



MOTORCYCLE HEAD LIGHTS

Each

No. 88N—A Large, Handsome Lamp for High Power and Fast Machines. Lighting efficiency about 1500 Candle Power; Diameter of Door 8½ in.; Made of Heavy Brass and Steel, Finished in Black and Nickel; Equipped with Magic Mirror Lenses; Height 9 in., Diameter of Lens 6 in.; Price is for Lamp only, does not include Brackets or Generator...$5.50

Weight About 5 Lbs. Each

MOTORCYCLE TAIL LAMPS

Acetylene Type, Operated with Generator or Gas Tank

Each

No. 38—Made of Aluminum and Steel, Removable Rear Red Glass, Removable White Glass in back to show License Plate; Bracket is riveted to Lamp Body and will not separate from same. $1.75

One in a Box

Weight 12 Oz. Each

GENERATORS

For Motorcycle Lamps, No. 3

Each

No. 5—New Type Double Clamp, coupling bottom portion to top; May be readily separated for cleaning and quickly re-assembled, Fitted with Sifting Carbide Chamber, allowing ashes to fall below; Capacity 12 Oz. of Carbide, producing 3¾ cubic feet of gas; Height 8½ in., Diam. 3¼ in.; Without Bracket. $4.00

Weight About 3 Lbs. Each

No. E—Bracket for Generator 1.00

LAMP BRACKETS

Per Pair

No. A—To attach Old Sol Lamp No. 3 to machine (two required) either in front or behind head of Indian, Henderson, M. M., Reading, Standard, Sears, De Luxe, Merkel, Excelsior, Iver Johnson, Thor, Eagle, Emblem Flanders, Pope, Schickel or Yale Machines $1.00

LAVA TIPS

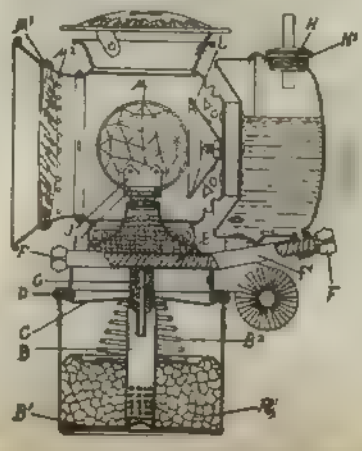
Per Dozen

No. 5—Will fit Solar, 20th Century and all other Standard Gas Lamps $1.50

Open Stock

COMPONENT PARTS FOR SOLAR LAMPS

	Each
B —Screen Tube	$0.10
B1 Screen Tube Plate	.10
B2—Carbide Spring	.10
C —Washer Plate	.05
C1—Washer Plate Nut	.05
D —Rubber Washer	.05
E Fiber Wick	.05
F —Wick Tube Cap	.05
F1 -Wick Tube	.10
G Water Valve	.40
G1 Water Valve Washer and Nut	.05
H —Filler Cap	.10
H1—Filler Cap Washer	.01
I —Tip Holder	.10
J —Tip	.35
K —Ratchet Screw	.10
L —Reflector	.10
M —Jewel (Red or Green)	.15
M1 Lens Doors	.20
M2—Lens	.35
N —Bracket Complete	.75
O Bracket Side R. H.	.10
O1—Bracket Side L. H.	.10
P —Clamp Thumb Screw	.10
Q —Clamp Thumb Screw Nut	.05
R —Carbide Tank	.45
S —Ratchet Screw Thumb Nut	.05
T —Pivot Bolt	.10
U —Pivot Bolt Nut	.05
V —Ratchet Arm	.10
W —Bracket Lining	.05



For ½ in. Calcium Carbide, see Page 349

COMPONENT PARTS FOR 20TH CENTURY LAMPS

Nos.	Each
1—Front Glass, Clear	$0.15
2—Front Glass, Red	.20
3—Front Glass, Green	.20
4—Front Glass Circle Wire	.05
51—Lava Tip, with Metal Cap	.20
53—Aluminum Reflector and No. 66	.20
55—Reflector Circle Wire	.05
56—Door Hinge, with Rivets	.15
57—Door Catch, with Rivets	.20
58—Screw Water Stopper	.10
59—Water Valve Rod	.35
70—Water Valve Arm	.10
71—Water Valve Nut	.10
72 Water Valve Leather Washer	.05
73—Water Valve Rod, with Nos 68 to 72	.40
75—Felt Screen Cap	.05
76—Rubber Washer, Imbeds Carbide Cup	.05
77—Leather Washer (Bottom Thumb Screw)	.05
79 -Bracket Bolt, Wing Nut	.15
80—Door, with Glass Complete	.50
81—Side Jewels, Red and Green	.15
82—Chimney Cap	.15
83—Plate and 2 Screws Complete, to Fasten Body to Reservoir	.20
85—Body, with Nos 53, 67, 80, 81, 82 and 83	1.85
86 Carbide Chamber	.40
87 Carbide Bottomless Cup	.20
88—Perforated Cloth Covered Tube	.15
89 -Spring Double Disc	.15
90—Bottom Screw and No. 77	.30
91 Bracket Band Complete	.25
92 -Band Thumb Bolt and Screw	.15
94—Water Reservoir	1.00

BICYCLE AND MOTORCYCLE PEDALS

Nickel Plated and Polished Steel Frame, Tool Steel Pin; Ball Bearings at Both Ends, Dust Proof Caps

MEN'S BRIDGEPORT BICYCLE

Per Pair

No. 2—Screw End of Pin is $\frac{7}{16}$ in. Long; ½ in. Diameter, No. 20 Thread; Strictly High Grade $1.10
Weight 1 Lb per Pair

WOMEN'S BRIDGEPORT BICYCLE

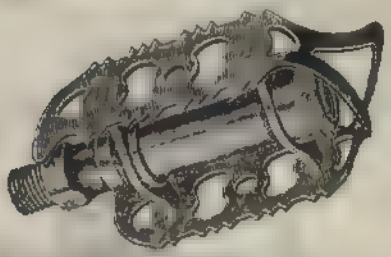
Per Pair

No. 5—Woman's Combination Bridgeport Pedals fitted with Rubbers to Clamp over Teeth of Pedal, protecting sole of shoe from wear, May be used with or without Rubbers.....$1.30
One Pair in a Box, Weight 1¼ Lbs. per Pair

STANDARD BICYCLE

Per Pair

No. 1—Screw End of Pin is $\frac{7}{16}$ in. Long; ½ in. Diameter, No. 20 Thread; For General Repair Work $1.00
Weight ¾ Lb. per Pair



STANDARD JUVENILE BICYCLE

Nickel Plated Steel; Ball Bearings at Each End; Hardened Cones and Cups; ⅜ inch Pin, No. 20 Thread; Corrugated Side Tops; Slotted Cap; 1⅛ in. Sides.

Per Pair

No. 11—Boys' Rat Trap; Weight 14 Ozs. per Pair $1.00
No. 12—Girls' Combination; with Pedal Rubbers; Otherwise same as No. 11; Weight 17 Ozs. per Pair..... 1.20
One Pair in a Box

STANDARD BICYCLE

Made Extra Wide, Affording Plenty of Foot

Per Pair

No. 4—Size 3¾x2¼ in.; Running Parts, High Grade Steel, Nickel Plated, Wide Tread $0.90
One Pair in a Box; Weight 1¾ Lbs. per Pair

PIRATE BICYCLE

Per Pair

No. 1P—Rat Trap; Nickel Plated, Ball Bearing; a well made Pedal at a Moderate Price $0.85
One Pair in a Box
Weight ¾ Lb. per Pair

BICYCLE OR MOTORCYCLE

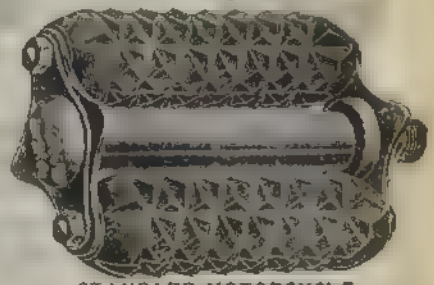
Per Pair

No. 5P—Heavy Rubbers, 1 in. in. Diameter, 4 in. Long, Ball Bearings at Each End; ½ in. Pin, No. 20 Thread; Nickel Plated Frame.....$1.40
One Pair in a Box, Weight 2¼ Lbs. per Pair

BICYCLE OR MOTORCYCLE

Per Pair

No. 4P—Wide Foot Bearing, for Heavy Service on Bicycle, and also for Motorcycle replacement; Ball Bearings at each End; 4 in. Long, 3 in. Wide; Nickel Plated Frame.....$1.50
One Pair in a Box; Weight 1⅞ Lbs. per Pair

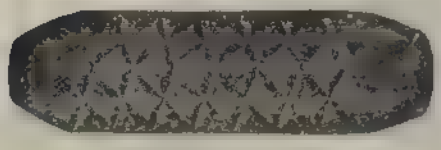


STANDARD MOTORCYCLE

Per Pair

No. 3—A Wide Tread Pedal, combining Comfort, Utility and Reliability; ⅝ in. Hardened Steel Axle; Both Bearings same size at extreme ends, using ¼ in. Balls; Deeply Corrugated Rubbers supported on square rods which can be turned when worn $2.00
One Pair in a Box; Weight 2 Lbs. per Pair

PEDAL RUBBERS



FOR MOTORCYCLES

Per Dozen

No. 3R—Hard Black Rubber, Deeply Corrugated; Length 4 in., 1 in. Square; ¼ in. Hole through Center $2.00
Open Stock; Weight 3 Lbs. per Dozen

FOR BICYCLES

Per Set of 8 Pieces

No. 10—Fits any Rat Trap Pedal; gives good non-slipping surface; Length 2½ in. $0.30
Open Stock; Weight ⅛ Lb. per Set

TOE CLIPS

THIEM COMBINATION

Per Dozen Pairs

No. 25—Made of Nickel Plated Steel Wire with Arched Steel Base; can be fitted with One, Two or Three Bolts and is Adjustable to any Size Shoe; Will not Slip nor Turn on the Pedal $2.80
One Dozen Pair in a Box
Weight 3¼ Lbs. per Dozen Pair

BICYCLE SADDLES

EAGLE EASY BICYCLE

Each

No. 8—Stamped Steel Frame, fitted with the latest "No Bump" Springs; English Russet Leather Top, Strongly Reinforced; Converts an ordinary mount into a Cushion Frame Bicycle; Length of Seat 11 in., Width 8¾ in.; Length Over-all 12 in. $4.00

Weight 4 Lbs. 6 Oz. Each

BICYCLE

Each

No. 2—Men's; Waterproof Leather Covered; Hair Padded over Five Ply Wood Base; Perfectly Shaped and Finished; Cushion Comfort Springs, Finished in Black Enamel; Length 10½ in., Width 8½ in.....$4.00

Weight 4 Lbs., 10 Oz. Each

EAGLE SCOUT BICYCLE

Each

No. 15—Men's; Russet Leather Covered; Hair Felt Padded over Wood Base; Cushion Comfort Springs; Length of Seat 9½ in., Width 7½ in. $3 00

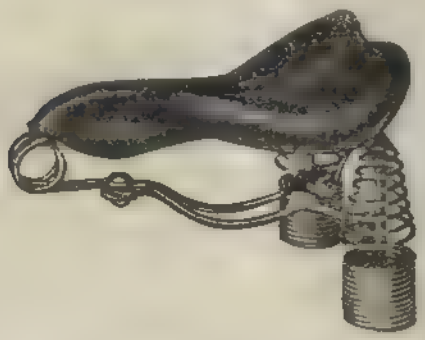
Weight 3 Lbs. Each.

TIP TOP BICYCLE

Each

No. 18—Stamped Steel Frame and Trusses; Cushion Comfort Spring, Combined with Cone Spring; All Black Enameled; English Russet Leather Top; Length of Seat 9¾ in., Width 7½ in. $3.50

Weight 3 Lbs 5 Oz. Each



BICYCLE

Each

No. 14—Men's, Elk Grained Leather Covered; Hair Felt Padded; High Back, Wood Base; Fitted with Cushion Comfort Springs; Length of Seat 10¼ in., Width 8 in.....$3.75

Weight 3 Lbs 3 Oz. Each

BICYCLE

Each

No. 23—Men's, Brown Leather; Wood Base; High Back. Nickel Plated Universal Springs; Length of Seat 9¼ in., Width 8 in $1 50

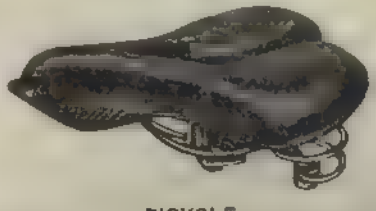
Weight 2 Lbs. Each

BICYCLE

Each

No. 85—Men's, Brown Leather, Wood Base; Diamond Center, Padded; Truss Spring; Size 9½ in. Long; 7½ in. Wide..$1.00

Weight 1⅛ Lbs. Each



BICYCLE

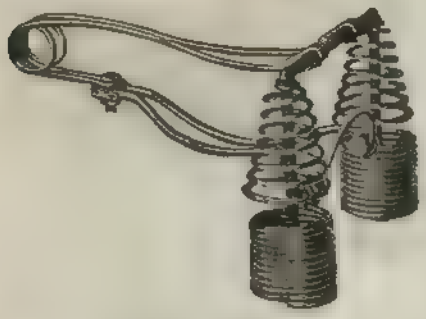
Each

No. 40—Women's, Brown Leather; Wood Base; Hair Padded; Diamond Center; Coil Spring; Size 8 in. Long; 8¼ in. Wide $1.50

Weight 1¼ Lbs. Each

All Above, One in a Box

BICYCLE SADDLE SPRINGS

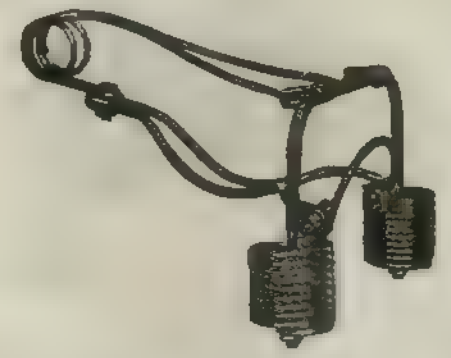


CUSHION COMFORT

Each

No. 7—Heavy Tempered Spring Wire Nickel Plated; No Bump Cushion Springs which will give Maximum Saddle Comfort; Adjustable to any Wood Base Saddle $1.00

One in a Box, Weight 2½ Lbs. Each



Each

No. 6—Has Two Cushion Springs in the Rear; One Front Coil Spring, all Tempered and Nickel Plated, Adjustable to any Wood Base Saddle, Length Overall 10½ in. ..$0.90

One in a Box; Weight 2½ Lbs. Each

BICYCLE SADDLE SPRINGS

Each

No. 1—Universal, Enameled, ⅜ in. Steel. Adjustable to Fit any Saddle and make it Far More Comfortable for the Rider, as well as Easier on the Bicycle . $0.80

One in a Box; Weight 1⅛ Lbs. Each

BICYCLE SADDLE CLAMPS

This is the Clamp used on the majority of Saddles

Per Dozen

No. 1 Full Nickel Plated; Fits all Bicycle Seat Posts . ..$2.00

Open Stock; Weight 2¾ Lbs. per Dozen

TOOL BAGS

Each

No. 8—Men's; Pebble Leather; Complete with Straps; 7½ in. Long...$0.45

Open Stock, Weight 2¼ Lbs per Dozen

Men's, for Diamond Frame Wheel; 7x2¾x2 in.; Well Made; Japanned Patent Fastenings

Each

No. 1—Grain Leather $0.65

No. 2—Split Leather ..... .50

Open Stock, Weight 4 Lbs per Dozen

Each

No. 3—Women's, for Drop Frame Wheel; 8½x3½x1¼ in.; Split Leather; Japanned Patent Fastenings; Triangular; Made to Fit Front Angle of Frame $0.60

Open Stock; Weight 4 Lbs per Dozen

SEAT CLAMPS

CHALFANT DIRECT CLAMP

Bolts directly on to the Frame. No Seat Post required. Used principally to shorten the reach

Each

No. 8—For use with Round Spring Saddles Only; for 1 in. Tubing; Nickel Plated $0.75

Open Stock; Weight 4 Oz. Each

TROUSER GUARDS

OSTERGREN

Per Dozen Pairs

No. 31—Blued Steel, Easily Adjusted; May remain Clasped about the Ankle without annoyance, when not in use $0.60

Three Dozen Pairs in a Box

Weight ¾ Lb. per Dozen Pairs

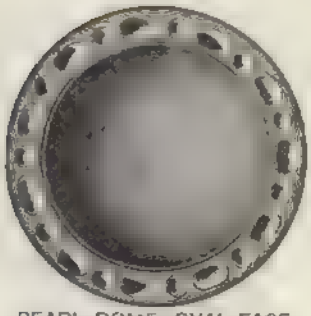
CORRUGATED

Per Dozen Pairs

No. 26 Enameled; Spring Tempered Steel, Easily Adjusted and will not Slip $0.50

One Pair in an Envelope, Three Dozen Pairs in a Box; Weight ¾ Lb. per Dozen Pairs

BRIDLE ROSETTES



PEARL DOME, OVAL FACE
1¾ in. Solid Back and Loop

	Per Gross
No. 1478—XC Plate	$7 20
No. 1475—Nickel Plated	8 80
No. 2177—Brass Plated	8.80

Weight 3½ Lbs. per Gross

PEARL STAR
1¾ in. Solid Back and Loop

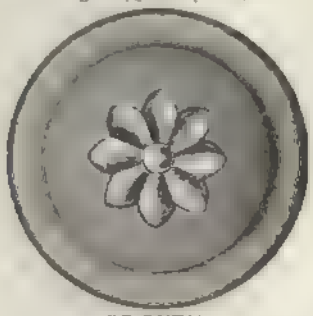
	Per Gross
No. 1438—XC Plate	$ 7 20
No. 1432—Nickel on Brass	12 00
No. 1430—Solid Brass	12.00

⅛ Gross in a Box; Weight 4½ Lbs. Gross

SHELL "A" PATTERN

	Per Gross
No. 75—Size 1¾ in., XC Plate, Wire Loop	$4.50

Weight 3½ Lbs. per Gross
All Al[illegible], [illegible] Gross in a Box



ORIENTAL
1¾ in. Solid Back and Loop

	Per Gross
No. 1392—Nickel on Brass	$12 00
No. 1390—Solid Brass	12 00

⅛ Gross in a Box; Weight 4½ Lbs. Gross

LEADER
No. 1122—Nickel on Brass
No. 1120—Solid Brass
Solid Back, Riveted Loop

Size, In.	1⅝	1¾	2	2¼
Weight Gross, Lbs.	7¼	8½	10	13½
Gross in Box	⅛	¼	¼	⅛
Per Gross	$11.70	13.00	16.40	23.20

SENATE
1¾ in. Solid Back and Loop

	Per Gross
No. 1448—XC Plate	$7 20
No. 1442—Nickel on Brass	12 00
No. 1440—Solid Brass	12 00

Weight 4½ Lbs. per Gross

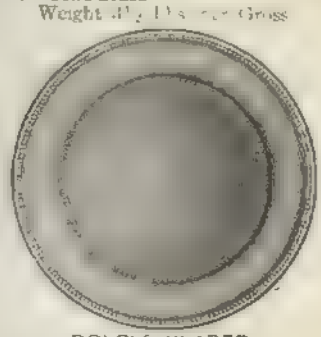
SPOT CENTER
(Matches Spot Center Harness, Auto Mattress Set No. 1160 Solid Brass Wire Loop on page 3690)
No. 414—Nickel on Brass
No. 424—Solid Brass

Size, In.	1¾	2
Weight Gross, Lbs.	7	9
Per Gross	$12.00	15.50

Heavy Metal, Filled Shell, Solid Back, Riveted Loop

FANCY HEAVY TRUCK
No. 1222—Nickel on Brass
No. 1220—Solid Brass

Size, In.	2	2¼
Weight Gross, Lbs.	19½	21
Per Gross	$23.80	28 00



DOUBLE BEADED
Iron or Brass Back and Loop
No. 1422—Nickel on Brass
No. 1420—Solid Brass

Size, In.	1½	1¾
Weight Gross, Lbs.	3¾	5
Per Gross	$10 00	12 00

One Third Gross in a Box

HEAVY TRUCK

No. 1212—Nickel on Brass	No. 1210—Solid Brass	
Size, In.	2	2¼
Weight Dozen, Lbs.	1¾	1⅞
Per Gross	$21.40	25 40

Heavy Metal, Filled Shell, Solid Back, Riveted Loop

STAR CAPITOL

No. 1252—Nickel on Brass	No. 1250—Solid Brass	
Size, In.	2¼	2¾
Weight Gross, Lbs.	18	23½
Per Gross	$23.40	30 60

BRIDLE ROSETTES

PLAIN CAPITAL

Size 2½ in., Heavy Metal Filled Shell, Solid Back, Riveted Loop, Polished Face

	Per Gross
No. 1232—Nickel on Brass	$21 60
No. 1230—Solid Brass	21 60

One Dozen in a Box

PLAIN COACH

Solid Back, Riveted Loop, Polished Face

No. 1030—Solid Brass
No. 1032—Nickel on Brass

Nos.		
Size, In.	1¾	2
Weight Dozen Lbs.	2½	3
Per Dozen	$1 60	1 60

One Quarter Gross in a Box

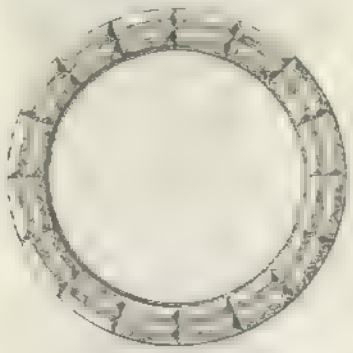
STERLING

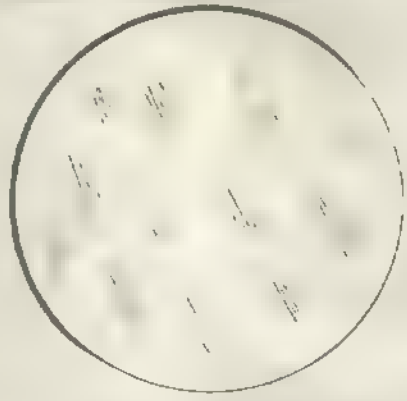
Slightly Convex Surface; Heavy Metal Smooth Back, Extra Strong Brazed Loop; Finely Finished

Nickel on Brass

Nos.	454
Size, In.	1½
Weight Gross, Lbs.	3¾
Per Dozen	$1.60

Six Dozen in a Box





FANCY FILLED

The Loop is fastened to the Metal Back which is laid in the Shell, and molten metal is then run on top of it, filling up the Shell and making a smooth even Surface

Price per Dozen			
Size, In.	1½	1¾	2¼
Weight Dozen Lbs.	1	1¼	1¾
No. 551—Solid Brass	$1.14	1.64	2.30
No. 0551—Silver on German Silver	1.50	1.90	....

Price per Dozen		
Size, In.	2	2¼
Weight Dozen Lbs.	1½	1¾
No. 532—Solid Brass	$1.90	2.30
No. 0532—Silver on Ger. Silver	2.30	2.60

Price per Dozen			
Size, In.	1½	1⅝	1¾
Weight Dozen Lbs.	⅝	½	¾
No. 18—Aluminum Bronze, Gold Color	$0.74	.86	.96
No. 118—Solid Nickel	1 06	1.26	1 40

1½ and 1¾ in., Two Dozen; 2 and 2¼ in., 1½ Dozen in a Box

IVORYETTE

Made of a Composition resembling rubber; Handsome in appearance and durable, Brass Loops imbedded in Composition; Raised Trimmings

Round, with Horse's Head and Bridle, Size 1⅝ in.

	Per Gross
No. 44—All Black	$7 50
No. 44N—Black, Nic. Horse Head	16 50
No. 44G—Black, Gilt Horse Head	16 50
No. 044N—Black, with Nickel Inlaid Ring around Horse's Head	16 50

Weight 6 Lbs. per Gross

Round, with Horse Shoe, Whip and Bit, Size 1⅝ in.

	Per Gross
No. 40—All Black	$7 50
No. 400—Black, with Nic. Trim	16 50

Weight 7 Lbs. per Gross

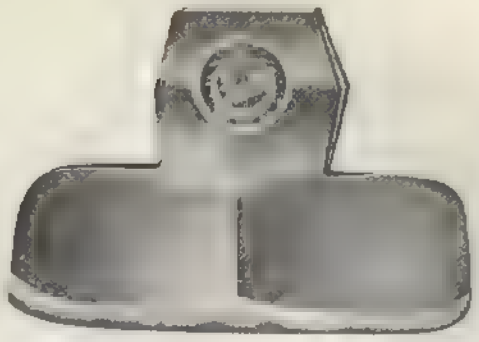
Half Gross in a Box

Oval, with Stirrup, Riding Crop and Cane, Size 1⅝x1⅛ in.

	Per Gross
No. 50B—All Black	$7 50
No. 50N—Black; Nic Stirrup	12 70
No. 50G—Black; Gilt Stirrup	12 70

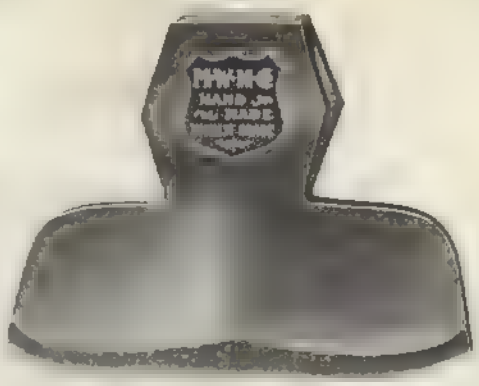
Weight 3½ Lbs. per Gross

BROAD AXES



Unconditionally

Guaranteed



IMPROVED ZENITH

This is the Finest Broad Axe that can be made; in addition to being forged from a Special Alloy Steel and Tempered and Toughened under an absolutely uniform and perfect Heat Treatment, it is specially shaped and ground, so that the back of the Axe, if tested with a Straight Edge, will be found to be true in any direction in which the Straight Edge may be placed; All forging stains have been drawn out of the Zenith Improved and the Axe will always retain its proper shape under any working conditions; Every Axe is carefully tested, and is subject to an Unconditional Guarantee.

Nos.	ZW6B	ZW6½B	ZW7B	ZW7½B	ZW8B
Weight, Lbs.	6	6½	7	7½	8
Width Cut, In.	10½	11	11½	12	12½
Per Dozen	$60 00	60 00	60 00	60 00	60 00

Half Dozen in a Box

HAND MADE, WISCONSIN PATTERN

Natural Black Finish; Round Cornered, Barton Head

Best Quality Crucible Tool Steel, Perfectly Welded, Beveled, Tempered, Ground and Sharpened. The Rounded Corners make the Axe Strictly Ready-for-use, without previous grinding. The Eye is unusually close to Body of Axe, to stiffen Blade and give Handle better control. Flat Back, test it either way with Straight Edge. This Pattern is made to our own specifications and embodies the best ideas of practical axemen

Nos.	XW6B	XW6½B	XW7B	XW7½B	XW8B	XW8½B
Weight, Lbs.	6	6½	7	7½	8	8½
Width Cut, In.	10½	11	11½	12	12½	.13
Weight Doz., Lbs.	89	93	98	108	114	122
Per Dozen	$42.00	44 00	44 00	46 00	46.00	48.00

Half Dozen in a Box

GENUINE BARTON, CANADA PATTERN

Per Dozen

No. BC6½B—Round Corners, Assorted Weights 6½ to 7½ Lbs., Width of Cut, 10½ to 12 in., Extra Cast Steel, Black Finish, Blue Label; Polished Head and Bit. Bit has slight Timber Spring which prevents binding; Handle lies close to Bit, giving perfect control and preventing binding. $45 00

Half Dozen Assorted Sizes in a Box, Average Weight 100 Lbs. per Dozen

FIREMEN'S AXES

UNDERHILL PATTERN, HANDLED

Used by Hook and Ladder Companies, also on Railway Trains, Boats, in Factories, Public Buildings, Schools, Hotels, Theatres, Etc

Per Dozen

No. 70—Assorted Weights, 4 to 4½ Lbs. 4½ to 5 in. Cut; 7¾ to 8 in. High, over Point; Extra Refined Steel, Polished Bit and Pick; Painted Red Poll; Selected 36 in. Painted Red Handle. $25 00

One Dozen in a Crate

Average Weight 70 Lbs. per Dozen

ICE AXES

CHICAGO PATTERN

For Chopping Ice, Especially for the Ice Delivery man on the Wagon.

Per Dozen

No. 60—Length of Head 15 in., Width of Bit 2⅛ in., Width of Point 4½ in.; Solid Steel, Red Body, Polished Bit and Pick; 28 in. Selected Hickory Handle; Weight 2¾ Lbs., without Handle $18.00

No. 65 22 in. Handle; otherwise same as above 18 00

Half Dozen in a Box; Weight 45 Lbs. per Dozen

BUTCHERS' KILLING AXES

Per Dozen

No. 96—Assorted Weights, 5½ to 6 Lbs., Extra Quality Steel Poll, Painted Blue; Width of Bits from 5⅛ to 6 in., Length 9½ to 10 in. . $43.00

One Dozen in a Box

Average Weight 60 Lbs. per Dozen

ADZES

ZENITH, LIPPED BIT SHIP
Warranted

Per Dozen

No. ZS441½L—4 to 4½ in. Cut; Extra Quality Tool Steel, Hand Made Finish Polished Front of Bit; Crucible Tool Steel Cutting Edge, Hardened Head and Spur; Ground and Sharpened$..30 00

Average Weight 50 Lbs. per Dozen

ZENITH, PLAIN BIT SHIP
Warranted

Per Dozen

No. ZS441½P- Assorted 4 to 4½ in Cut, Extra Quality Tool Steel, Hand Made Finish; Polished Bit; Crucible Tool Steel Cutting Edge, Hardened Head and Spur; Ground and Sharpened...$25 00

Average Weight 50 Lbs. per Dozen

One Dozen Assorted Sizes in a Box

WHITE, PLAIN BIT SHIP

No. WS45½—Superior Quality Steel, Black Finish, Blue Label, Polished Bit; Tool Steel Cutting Edge; Ground and Sharpened.

Width Bit, In.	4	4½	5	5½
Wt. Doz. Lbs.	32	36	40	45
Per Dozen	$60.00	66.00	66.00	72.00

Average Weight 60 Lbs. per Dozen

CARPENTERS' HALF HEAD

For Carpenters, Beam Workers and Wagon Makers

ZENITH, WARRANTED

Per Dozen

No. ZC34½—Assorted, 3½ to 4½ in. Cut; Extra Quality Tool Steel, Gold Bronzed, Polished Bit and Head; Crucible Tool Steel Cutting Edge, Hardened Head; Eye Punched from Solid Stock, Ground and Sharpened $34.00

Average Weight 55 Lbs. per Dozen

OUR HAND MADE, WARRANTED

Per Dozen

No. XC34½ —Assorted, 3½ to 4½ in. Cut; Hand Forged from Extra Quality Tool Steel, Black Finish; Crucible Tool Steel Cutting Edge, Hardened Head, Ground and Sharpened $24.00

Average Weight 55 Lbs. per Dozen

One Dozen Assorted Sizes in a Box

RAILROAD, FULL HEAD

HAND MADE, WARRANTED

For Tie Layers, Bridge Builders and General Railroad Work; for Extra Hard Service; Especially for Section Men; Strongly Reinforced where Strength is needed.

Per Dozen

No. XR55—5 in. Cut; Full Head, Black Finish; Forged from Extra Crucible Steel, Ground Ready for Use....$26.00

One Dozen in Box; Weight 65 Lbs. per Dozen

BRYAN MARSH INCANDESCENT ELECTRIC LAMPS

DRAWN WIRE MAZDA LAMPS

☞ TYPE "B" ☜

The new Drawn Wire Mazda Lamp produces a Pure White Light which so closely resembles natural daylight that colors and shades can be accurately matched. The saving of Electric Current and its long life makes it a more economical lamp than the ordinary Carbon Lamp; it uses less current, produces more light and lasts longer than any other lamp. It is a most satisfactory Lamp for Residences and all Public Buildings

Can be used on either Direct or Alternating Current, and burned at any angle.

NOTE—Clear Bowl will always be sent unless otherwise specified

☞ In ordering Lamps be sure to specify exact Voltage and Wattage

REGULAR TYPE

105 to 125 Volts; Standard Edison Base

Watts	Efficiency Watts per C. P	Diam In	Standard Package	Wt Std. Pkg	Clear Bowl Each	Frosted Bowl Each
7½	1.50	2⅛	100	45	$0.27	$0.30
10	1.30	2⅛	100	45	.27	.30
15	1.15	2⅛	100	45	.27	.30
20	1.10	2⅛	100	45	.27	.30
25	1.05	2⅜	100	45	.27	.30
40	1.03	2⅜	100	45	.27	.30
50	1.02	2⅝	100	45	.28	.31
60	1.00	2⅝	100	60	.36	.40
100	.95	3⅝	24	32	.66	.72
		220 to 250 Volts; Standard Edison Base				
25	1.20	2⅜	100	45	$0.33	$0.36
40	1.12	2⅜	100	45	33	36
60	1.10	2⅝	100	60	45	49
100	1.00	3¾	24	32	80	87
150	1.00	4⅜	24	32	1.20	1.80
250	.96	5	12	20	2.00	2.15

REGULAR TYPE; CONCENTRATED FILAMENT

105 to 125 Volts

25	2⅝	50	30	$0.32	$0.35
40	2⅝	50	30	.32	.35
60	2⅝	50	50	.41	.45

MAZDA SIGN LAMPS; EDISON BASE

Specially selected for Series and Multiple Series Burning

Watts	Candle Power	Diam In.	Standard Package	Wt. Std. Pkg.	Clear Bowl Each	Frosted Bowl Each
			10½ to 12½ Volts			
2½	2	1¾	100	36	$0.25	$0.28
5	4	1¾	100	36	.25	.28
			50 to 65 Volts			
5	4	1¾	100	36	.27	.30
			105 to 125 Volts			
10	8	1¾	100	36	.27	.30

ROUND BULB

105 to 125 Volts; Short Edison Base

Watts	Efficiency Watts per C. P.	Diam. In	Standard Package	Wt. Std. Pkg.	Clear Bowl Each	Frosted Bowl Each
15	1.15	3⅛	100	45	$0.45	$0.50
25	1.05	3⅛	50	30	.45	.50
40	1.03	3⅛	50	30	.45	.50
60	1.00	3¾	24	36	.65	.72
100	.95	4⅝	24	36	.95	1.05
		220 to 250 Volts; Skirted Base				
25	1.20	3⅛	50	30	$0.55	$0.60
40	1.12	3⅛	50	30	.55	.60

TUBULAR

105 to 125 Volts; Standard Edison Base

Watts	Efficiency Watts per C. P.	Diam. In	Standard Package	Wt. Std. Pkg	Clear Bowl Each	Frosted Bowl Each
25	1.05	1¼	100	45	$0.50	$0.55

BRYAN-MARSH SOCKET EXTENSIONS

	Each
No. 10—For Lengthening Ordinary Socket to Take Mazda Lamp	$0.15

☞ TYPE "C" OR GAS FILLED MAZDA LAMPS

The Type "C" or Gas Filled Mazda Lamp differs from the Type "B", as it it is filled with Gas in place of being a vacuum. It produces a light which is whiter an brighter, and resembles daylight more closely, than the light from any other type of lamp. These Lamps are suitable for outdoor or indoor,—for use with open shades, opaque globes, direct or indirect reflectors and are especially adapted for Store Window, Store Front and Theater Front lighting, and for the lighting of large Department Stores where the current consumption is large also Tennis Courts, Skating Rinks, Fair Grounds, Parks, etc., and for Street Lighting. More Candle Power of light can be produced from this Lamp per watt than any other, therefore current consumption can be greatly reduced by its use. Three .5 Candle Power Carbon Lamps consume as much current as a 250 Candle Power, 250 Watt Type "C" Lamp

Watts and Nos.	Efficiency Watts per Candle Power	Candle Power	Diameter in.	Base	Standard Package	Weight Std. Pkg.	Clear Bowl Each	Clear Bowl Frosted
				105 to 125 Volts, Pear Shaped				
N75	1.09	69	2⅝	Regular	50	60	$0.65	$0.70
N100	1.00	100	3⅛	Regular	24	32	1.00	1.05
N200	.90	222	3⅝	Regular	24	32	2.00	2.07
NE300	.82	366	4⅜	Regular Edison	24	32	3.00	3.10
NM300	.82	366	4⅜	Mogul or Large	24	32	3.00	3.10
N400	.82	488	5	Mogul or Large	12	25	4.00	4.15
N500	.78	641	5	Mogul or Large	12	25	4.50	4.65
N750	.74	1014	6½	Mogul or Large	8	20	6.00	6.25
N1000	.70	1429	6½	Mogul or Large	8	20	7.00	7.25

☞ In ordering Lamps be sure to specify exact Voltage and Wattage

NOTE—All Lamps having the same Standard Package quantity can be assorted to make Standard Package in ordering

For Lamp Changer, see page 477

INCANDESCENT ELECTRIC LAMPS

☞ In ordering be sure to specify exact Voltage and Wattage

OVAL ANCHORED ZENITH CARBON LAMPS

Class "A"

Standard Edison Base

104, 110 and 115 Volt carried in stock; Other Voltages can be furnished on special order

Watts	Candle Power	Diam. In.	Standard Package	Weight Std. Pkg	Clear Bowl Each
10	2	1⅝	250	45	$0.16
20	4	2⅛	250	45	.16
25	8	2⅛	250	45	.16
60	16	2⅝	250	45	.16
120	32	3	100	25	.24

220 to 250 Volts; Standard Edison Base

Watts	Candle Power	Diam. In.	Standard Package	Weight Std. Pkg	Clear Bowl Each
25	8	2⅛	250	45	$0.19
60	16	2⅝	250	45	.19
120	32	3	100	25	.30

ROUND BULB CARBON LAMPS

Class "A"

110 Volts; Standard Edison Base

Watts	Candle Power	Diam. In.	Standard Package	Wt. Std. Pkg.	Clear Bowl Each	Frosted Bowl Each
20	4	2	200	45	$0.20	$0.22½
30	8	2½	200	45	.20	.22½
50	16	2½	200	45	.20	.22½

TUBULAR LAMPS, CARBON FILAMENT

110 and 115 Volts; Standard Edison Base

Nos.	Watts	Candle Power	Diam. In.	Standard Pkg.	Weight Std. Pkg.	Clear Bowl Each
T101	30	8	1¼	200	40	$0.30
T102	60	16	1¼	200	40	.30

COLORING FLUID AND LAMP FROSTING

Gives the bulbs that snappy brilliancy of color that is seldom obtainable except in natural colored glass. When used according to our directions, we guarantee satisfaction.

Furnished in Blue, Green, Red, Canary, Frosting and Purple.

CRESCENT; ONE PINT BOTTLES

	Each
No. B1—Blue	$2.00
No. G1—Green	2.00
No. R1—Red	2.00
No. C1—Canary	2.00
No. F1—Frosting	2.00
No. P1—Purple	2.00

Weight 2 Lbs. Each

OVAL ANCHORED REFILLED CARBON LAMPS

104 Volt; Standard Edison Base; Clear Bowl

Watts	Candle Power	Diam. In.	Standard Package	Weight Std. Pkg.	Each
20	4	2⅛	250	45	.12
25	8	2⅛	250	45	.12
60	16	2⅝	250	45	.12
120	32	3	100	25	.20

110 Volt; Standard Edison Base

Watts	Candle Power	Diam. In.	Standard Package	Weight Std. Pkg	Clear Bowl Each
10	2	2⅛	250	45	$0 12
20	4	2⅛	250	45	.12
25	8	2⅛	250	45	.12
60	16	2⅝	250	45	.12
120	32	3	100	25	.20

MILL TYPE CARBON LAMPS

Class "A"

Standard Edison Base; Clear Bowl

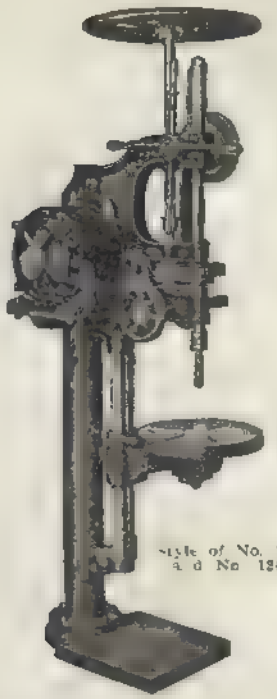
110 and 120 Volt Series Burning carried in stock

Watts	Candle Power	Diam. In.	Standard Package	Weight Std. Pkg	Clear Bowl Each
[illegible]	16	2⅝	250	45	$0.20
120	32	3	100	25	.28

NOTE—Carbon Lamps are not included in contract schedule. We can furnish on special order special voltage Carbon Lamps promptly

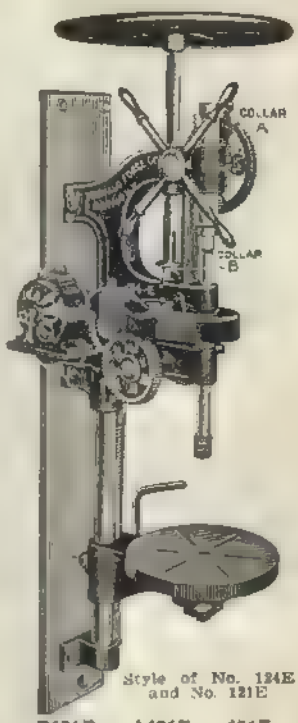
For Lamp Changer, see page 477

BUFFALO ELECTRIC POST AND FLOOR DRILLS



Style of No. 121CE and No. 124CE

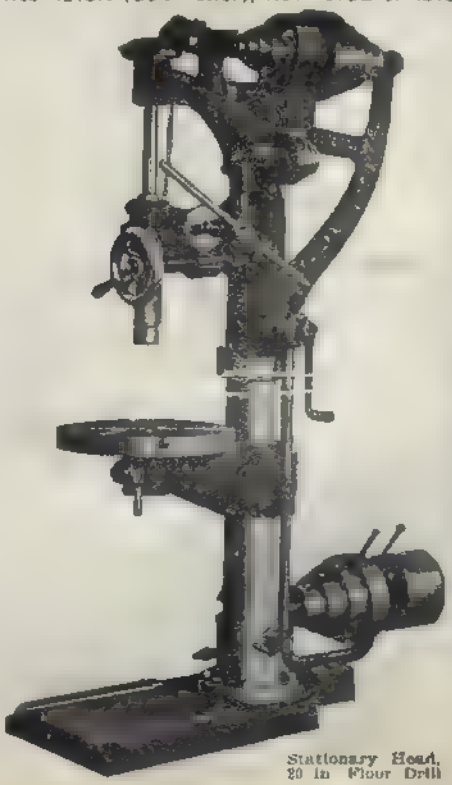
All Gears are machine cut and fitted with absolute accuracy, resulting in smooth, noiseless operation. The Spindle is raised or lowered in an instant by means of the Four-Arm Lever, which effects a great saving of time in boring wood, reaming and drilling small holes. For larger holes use the Automatic Feed, which is adjustable. One Sliding Collar (A) is arranged at Feed Head for changing instantly from Hand Lever to Automatic Feed, or back. Another (B) is at lower end of Fly Wheel Shaft, to change from Slow to Fast Speed, or back. Either change is made in a second—the Collar will slide regardless of position of Key, and seat itself automatically. In no other Drill will this convenient feature be found.



Style of No. 124E and No. 121E

Nos.	A124CE	124CE	A121CE	121CE	B124E	A124E	124E	B121E	A121E	121E	124CA
Horsepower	¼	½	¼	½	⅛	¼	½	⅛	¼	½	....
Capacity Holes in Steel, In.	1⅛	1⅛	1¼	1⅛	⅞	1¼	1⅛	⅞	1¼	1⅛	1⅛
Capacity Drills to Center of Circle, In.	24	24	21	21	24	24	24	21	21	21	24
Run of Feed, In.	8	8	7¼	7¼	8	8	8	7¼	7¼	7¼	8
Run of Table, In.	20	20	17	17	20	20	20	17	17	17	20
Length, Overall, In.	78	78	78	78	72	72	72	69	69	69	78
Weight, Complete Lbs	660	670	600	610	440	450	460	380	390	400	600
With Tight and Loose Pulleys Only.*$	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	132 00
Direct Current, Each	262 00	340 00	242.00	330 00	180 00	220 00	320 00	170 00	210 00	310 00	.....
A. C., 60 C. S. P., 110 or 220 V., Each	272 00	380 00	262 00	370 00	202 00	242.00	342 00	192 00	232 00	332 00	.....

When Ordering, State Character of Current. Chuck is Bored for ½ in. Straight Shank Bits; On Special Orders, also Furnished for 4⅞, or ⅝ in. or No. 2 Morse Taper at same price, Extra for No. 3 Morse Taper, List Price $8.00; Extra for No. 4 Morse Taper, List Price $10.00
Nos 124CA (Belt Power), Nos 121CE or 124CE are supplied with Tee Slotted Machine Shop Base or Short Wheel Base at no Extra Charge



Stationary Head, 20 in. Floor Drill

BUFFALO POWER DRILLS

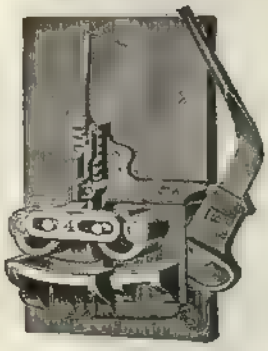
Stationary Head, 20 in. Swing

These Drills are made in Five Styles, differing only in Speeds and Method of Feed Crucible Steel Spindles arranged for quick approach and return operated by Hand Lever. End Thrust taken up by Ball Bearings. Balanced by means of Weight in Column. Machined Columns are bolted solidly to heavy Bases, provided with T Slots; Upper Drive Shaft Bearings split for adjusting wear. Back Gears quickly thrown in or out by means of Improved Locking Device. No Wrench required. Power Feed obtained by raising Lever at left of Head until it locks. Can be quickly tripped to obtain Lever Feed. For Hand Feed, keep Lever locked but loosen Knurl Knob in center of Hand Wheel. Single Automatic Stop quickly adjustable and trips off instantly when desired depth is reached. Table raised and lowered by means of Handle on right side of Column. Can be swung to either side or swiveled in its socket. Also Slotted for Clamping Bolts. Belt Shifter conveniently located for foot operation.

Height of Drill 74 in., Capacity up to 1½ in. Hole to Center of 20 in. Circle; Greatest Distance between Base and Spindle, 41½ in.; Greatest Distance between Table and Spindle, 25½ in.; Travel of Spindle 8½ in.; Diameter of Spindle in Sleeve, 1⅝ in.; Diameter of Spindle above Sleeve, 1¼ in.; Spindle Bored regularly for No. 3 Morse Taper, for F¼ in. Diameter Drills; Extra for No. 4 Morse Taper, for 1⅛ in. Diameter Drills $10.00 List; Diameter of Table, 15½ in.; Diameter of Column, 5½ in.; Size of Tight and Loose Pulley, 8x3 in.; Speed of Drive Pulleys, 300 Revolutions per Minute; Diameter of Crown Gear, 5⅝ in.; Smallest Diameter of Cone Pulley, 4 in.; Largest Diameter of Cone Pulleys, 9 in.; Width of Cone Pulley Steps, 2⅛ in

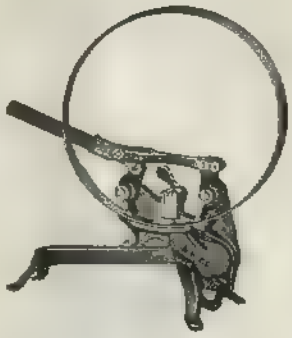
	Each
No. 1—20 in. Plain Lever Feed; Net Weight 780 Lbs.; Crated, Weight 920 Lbs.	*$170.00
No. 2—20 in. Lever and Wheel Feed; Net Weight 800 Lbs.; Crated, Weight 940 Lbs.	190.00
No. 3—20 in. Lever, Wheel and Automatic Feed and Stop; Net Weight 810 Lbs.; Crated, Weight 950 Lbs.	220.00
No. 4—20 in., Back Geared, with Wheel Feed; Net Weight 800 Lbs.; Crated, Weight 940 Lbs.	230.00
No. 5—20 in., Back Geared, with Wheel and Automatic Feed and Stop; Net Weight 820 Lbs.; Crated, Weight 960 Lbs.	260.00

TIRE SHRINKERS



Used in Blacksmith Shops, Carriage and Wagon Works

These Machines can be Operated by One Man; Occupy Little Space, will not Kink the Tire; the Dogs which grip the Tire are chill faced, hold perfectly and can be resharpened or replaced at small expense.



STODDARD

	*Each
No 1—For Tires to 2 in. Wide, Weight 100 Lbs	$16 00
No. 2—For Tires to 4 in Wide, Weight 225 Lbs	28 00
No. 3—Special 4 in. Tire Machine, has a Set of Loose Jaws which can be Adjusted for Large and Small Circles and for Upsetting Axles up to 1¾ in. Square, Weight 275 Lbs	35 00
No. 4—For Tires to 6 in Wide; Wt. 400 Lbs	45 00
No. 5—Special 6 in. Tire Machine, also Takes Axles up to 2 in. Square	54 00

Weight 480 Lbs.

MOLE ANTI-KINK

Made entirely of iron; has Hardened Steel Plates in the Dogs for gripping the Tire. Plates easily sharpened and renewed.

	*Each
No 20—Size 2, Has 3 in. Bed and is Adapted to all but Heaviest Work; Wt. 225 Lbs	$25.00
No. 30—Size 3, Has 4 in. Bed and is Adapted for Heavy Wagon and Truck Tires; Weight 300 Lbs	30.00

TIRE BENDERS

Used in Blacksmith Shops, Carriage and Wagon Works, etc.

IMPROVED, DOUBLE GEARED

	*Each
No. 03—Has Turned Rollers and Bearings, Will Bend 5 in Tire, or Smaller, to a Circle 24 in. Diameter or Larger; In Bending Heavy Tires Two Cranks can be used, thus giving Double Power	$21.00

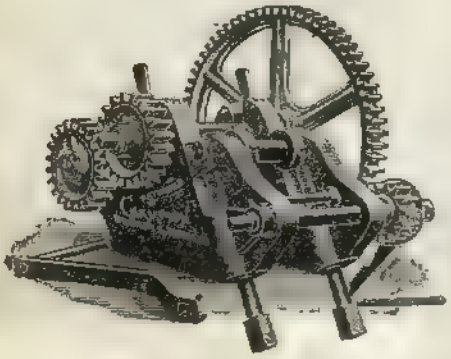
Weight 160 Lbs. Each

SIMPLICITY

	*Each
No. 02 With Gear and Pinion, has Turned Rollers and Bearing and will Bend 3¼ in. Tire or Smaller, to a Circle 24 in in Diameter or Larger	$16.00

Weight 85 Lbs. Each

TIRE BENDERS

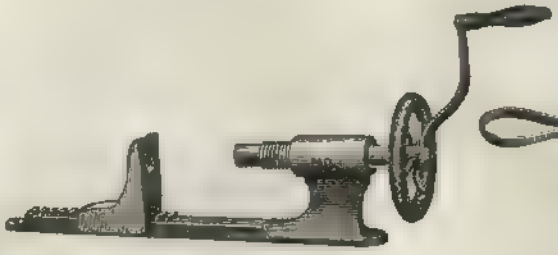


EUREKA

	*Each
No 200—Strong and Powerful; Adjusting Screws at Each End of Rolls; Graduated Indicator on Each Side, Collars on End of Rolls Prevent Tire from Twisting and make both Ends Meet; Two Speeds; Bends Fifth Wheels and 6x1 in. Tires	$50.00

Weight 300 Lbs. Each

TIRE DRILLS



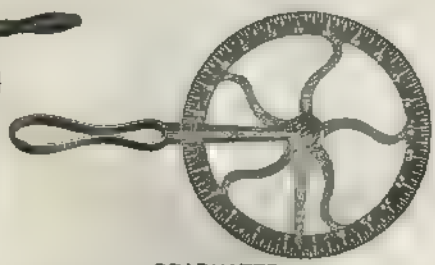
HORIZONTAL

	*Each
No. 01—Solid Standard, Length of Base 28 in.; Opens 12 in.; Cast Iron Frame, Japanned; Steel Spindle and Bearings; Takes Bit Stock Drills	$4 80

Weight 30 Lbs. Each

All Above, Open Stock

TIRE MEASURING WHEELS



GRADUATED

Used by Blacksmiths and Carriage Makers for Measuring Inside of Tire and Outside of Wheel; also used by Boiler Makers.

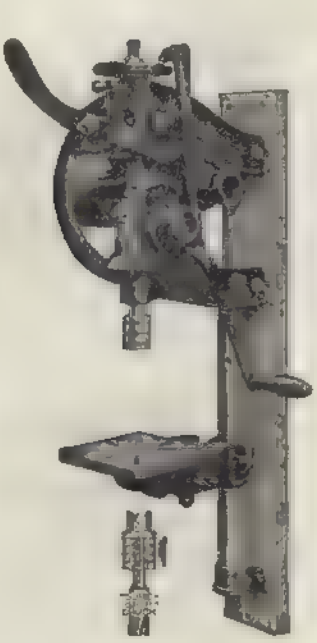
	Each
No. 24—Wheel is Drop Forged, Malleable Iron Handle; the Figures and Lines are cut into the metal. It is a perfect running wheel, turned carefully in a lathe, 24 in. in circumference. The index hand saves trouble of marking with chalk and the whole, made of metal, is light, accurately fitted, reliable, handy and strong	$2 50

Weight 1⅛ Lbs. Each

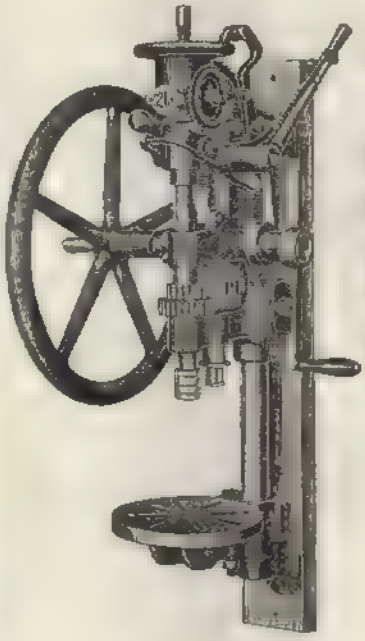
BLACKSMITHS' BALL BEARING POST DRILLS

BUFFALO FORGE CO.

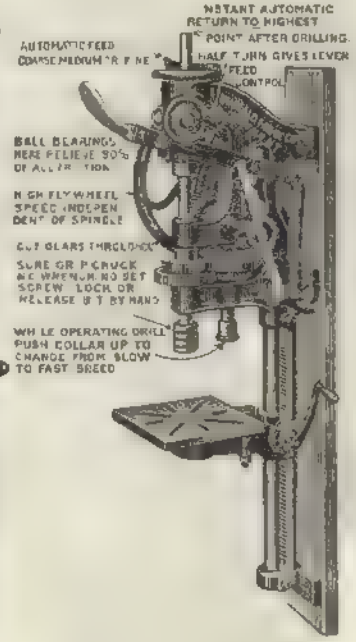
Recognized as the World's Standard in Labor and Time Saving Drilling Machines and Each Drill is Equipped with Combination Automatic Feed and Lever Feeds, and Instantaneous Quick-return Spindles, fitted with Buffalo Sure Grip Drill Chucks, in which a Drill cannot slip or turn; There are Two Speeds, for light and heavy work, and Three Adjustments on the Automatic Feed of Fine, Medium and Coarse feeds; Wheel Holding Attachment Free with Each Drill; Shaft and Spindles are Polished Steel; Tables are Lathe Turned and can be swung out of way or slide up and down, Tables slotted for clamping down or bolting on work and may be turned so several Holes can be Bored before removing; Rigid Frame with Extra Heavy Journal Bearings, When using Lever Feed, Spindle can be raised or lowered to suit work being done; Hand Painted and Finely Finished.



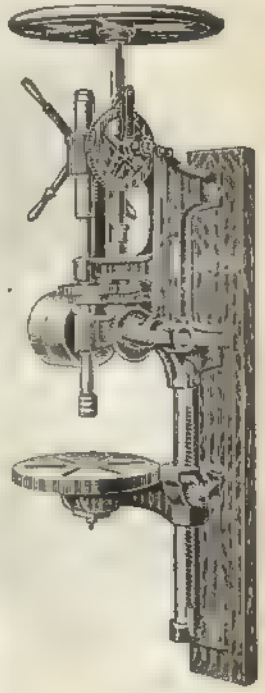
Nos. P98 and 99



No. 218



No. 94



No. 124

Nos. P98 and 99—Drills vary only in size and capacity (see table below). They will handle the general line of Blacksmith, Wagon and Repair Shop Work. Equipped with both Hand and Automatic Feed. With quick return of spindle Automatic Feeds are adjustable to three speed. Sure Grip Chuck furnished.

No. 218—This is one of the latest side Fly Wheel Drills and is fitted with our compound quick return Lever, adjustable to any position. Speed changes instantly, changed by shifting collar up or down. Automatic Feed thrown in or out by moving small hand wheel at top of Drill Head. Every Gear is machine cut and carefully assembled. Furnished with wheel Holder and Sure Grip Chuck

No. 94—This is an Extra Heavy Machine Cut Geared Drill, fitted with Automatic and Lever Feed, with quick return Spindle. Speed changes, from high to low speed, are instantly made by pushing collar up or down. Tables are Lathe Turned, Wheel Holder furnished free. Automatic Feed locked or released instantly.

No. 124—This Multi-Compound Lever Feed Drill exceeds all others in superior strength and durability; Machine Cut Gears, Two Speeds, Automatic Feed adjustable to four rates of speed. Two Sliding Collars, one Sliding Collar is arranged at feed head, changing instantly from hand to automatic feed. The other at lower end of Fly Wheel Shaft change from high to low spindle speed—instant change. Complete with Wheel Holder and Sure Grip Chuck, Lathe Turned Table and Gear Guard

CAPACITY TABLES, BUFFALO BALL BEARING DRILLS, WITH SURE GRIP DRILL CHUCKS

Spindles all Bored for ½ in. Straight Shank Drill Bits

Nos.	99	P98	218	94	124
Drill Holes, In	1¼	1¼	1½	1½	1½
Center of Circle, In	15½	18	18	21	24
Feed Run, In	3	3½	4½	4½	7½
Table Run, In	12	14½	18	18	20
Size Pulleys, In	6	8	8	8	8
Length In	40	46	52	62	72
Weight, Lbs	140	175	260	280	390
Hand, Each	336 00	50 00	60 00	80.00	94.00
Hand and Power, Each	42 00	58.00	68.00	88.00	102.00

Note—Portland and Spokane Stock have Spindles Bored for ⅝ in. Straight Shank Drills

BUFFALO ELECTRIC BLOWERS AND FORGES

The No. 2E Variable Speed Blower is the standard one fire electric blower in size and strength of blast equal to other two fire blowers. It will blow large fires with ease. It is 15 in high, with fan fully 14 in. in diameter. The fan thus produces a high blast pressure at a slow speed, which reduces friction and wear. All parts are made on generous proportions, to stand up under continuous, heavy wear much longer than can possibly be expected from smaller motors. The motor casing is dust proof, preventing metal filings from getting into the windings. Easy access to brushes obtained through hinged doors; the size of the brushes is over twice the ordinary, insuring correspondingly long life; the oil cups cannot be broken.

The Variable Speed Blowers are so designed that they will operate with equal efficiency on any circuit, either direct or alternating current, 25, 40 or 60 cycle, single phase, 110-220 volts. When ordering, state Voltage.

The Six-Speed Regulator gives close control of the fire and is furnished with all Universal Motors.

Fifteen feet of heavy regulation wire and plug are furnished free—simply screw the plug into a lamp socket to make the connection.

The Constant Speed Electric Forge Blowers are intended for similar service but are equipped with Blast Gates to regulate the Blast instead of Speed Regulators. Fifteen 15 feet of regulation cord, plug to connect to lamp socket furnished. These machines are specially adapted for continuous service—the large size being used on large Forge shop service and Blowing small church organs, etc. In ordering Constant Speed Blowers, State Voltage, Phase, Cycle and whether direct or alternating current.

Nos.	1E	2E	2EH	3E	4E
For Fires	1 Small	1 Small	1012	203	3 to 5
Height, In.	10	15	15	15	20
Diameter, Outlet, In.	3	3	3	4	5
Revolution, per Minute, Universal	3800	2200	3000	3000	....
Revolution, per Minute, Direct Current		1800	3000	3000	3200
Revolution, per Minute, Alternating Current		1700	3400	3400	3400
Constant Speed, Direct Current, Each	$	40 00	50 00	64 00	96 00
Constant Speed, Alternating Current, Each		40.00	60 00	80 00	110.00
Variable Speed, Universal Motors, Each	36.00	40.00	58.00	75.00	.....

BUFFALO ELECTRIC FORGES

These Forges are of ample capacity for heavy blacksmithing; spacious hearth, widened out on both sides of the tuyere, and with coal box at one end, cast in the hearth. Equipped with heavy duty "Vulcan" tuyere, which gives unequalled heating capacity. It takes the heaviest iron, up to 12 in. long in one heat, without removing the iron. The valve is adjustable to a smaller fire, and when turned breaks up clinkers and removes same with the ashes, the clearance being very large.

Nos.	Size of Hearth	Approx. Shipping Weight	With Water Tank Each	Without Tank Each
228E	32x45 in.	365 Lbs.	$59.40	$56 00
650E	28x40 in.	310 Lbs.	52 40	50 00
651E	23x30 in.	200 Lbs.	47.50	45 00
870E	38x42 in.	560 Lbs.	85.00	82 00

No. 228E has Coal Box

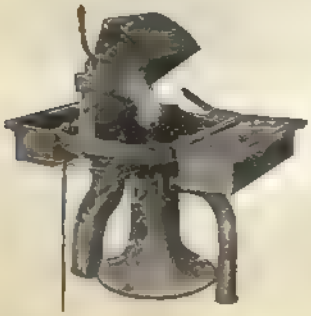
BUFFALO PORTABLE DOWN DRAFT ELECTRIC FORGE

The patented "Down Draft" System keeps the forge shop clean and healthful by mechanically removing the excess smoke and gases which ordinarily escape into the shop. The smoke is returned through a special pipe to the fire for complete combustion. This saves coal and gives quicker, cleaner welds. The additional advantage of healthful working conditions is worth even more.

Equipped with Electric Blower No. 2E-H

Nos.	Size of Hearth	Approx. Shipping Weight	With Water Tank Each	Without Tank Each
660E	28x40 in.	475 Lbs.	$ 83 00	$ 80 00
680E	38x42 in.	600 Lbs.	113 00	110.00

No. 680E has Cast Iron Legs



BUFFALO STATIONARY DOWN DRAFT FORGES

The "Down Draft" system implies permanent underground blast and exhaust connections, instead of the customary short-lived and cumbersome overhead hoods and piping. The Buffalo "Down Draft" Forges embody pipe arrangements for connection at floor line and include the "Down Draft" exhaust hood, which is connected to the hearth directly back of the fire. This system has gained world-wide recognition for its advantages.

The No. 02D is designed especially for manual training schools, where it is used more extensively than any other forge.

Compact and stable, built entirely of heavy cast iron.

Wherever floor space is limited, these Forges, placed back to back, exhausting into a single pipe, utilize the limited area to good advantage.

No.	Size of Fire Pan	Height to Top of Fire Pan	Size of Tanks	Connections Blast	Connections Exhaust	Weight Complete	Each
02D	24x36⅛ in.	29 in.	27x9x6½ in.	3 in.	6 in.	420 Lbs.	$56.00

CABINET AND VENEER SCRAPERS

Adjustable to any Thickness of Blade; Knurled Thumb Screws; the Blade can be Sprung to a Slight Curve by the Thumb Screw, which will be found a great advantage in many places

ZENITH

Per Dozen

No. Z115—2¾ in. Polished Steel Reversible Blade; Black Enameled Frame 11½ in. Long; Nickel Plated Thumb Screws $12.00

One in a Box; Weight 21 Lbs. per Dozen

No. Z115B—Extra Blades $2 50

STANLEY

Per Dozen

No. 80—2¾ in. Cut; Japanned, Raised Handles; Length 11 in.....$12.00

Each

No. 80A—Extra Blades $0.30

HAND CABINET SCRAPERS

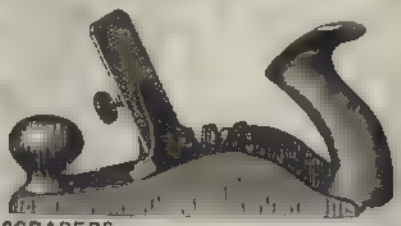
High Grade Steel, Special Temper, Polished

Per Dozen

No. 84—Size 3 x4 in.; Weight 1½ Lbs. $0.80

No. 85—Size 3½x5 in.; Weight 2¼ Lbs. 1.15

One Dozen in a Box



ADJUSTABLE SCRAPERS

Blades are Adjustable and can be firmly locked in position desired; Used for Scraping off Old Paint or Glue and for Veneering; Rosewood Handle and Knob

Each

No. Z112—9 in. Long, 3 in. Cutter.....$3.50

Weight 4½ Lbs. Each

Each

No. 112—9 in. Long, 3 in. Cutter.....$2 20

Weight 4 Lbs. Each

EXTRA CUTTERS, for Nos. Z112 or 112

Each

For Veneering $0.20

Per Inch

For Toothing, with 22, 28 or 30 Teeth... .. . . . $0 30

RABBET CABINET SCRAPERS

The Cutter rests against the front edge of mouth under a slight pressure; When working, Cutter springs backward, opening the mouth for shaving to pass through; When pressure is released, Cutter springs back to normal position, closing the mouth and preventing dust or shavings falling on finished work; Rosewood Handle and Knob, pivoted to allow tilting, for convenience in working in corners

Each

No. 85—9 in. Long, 3 in. Cut.....$3 00

Weight 2½ Lbs. Each

SPOKE SHAVES

TWO CUTTER

Has Two Cutters and separate Seats, one Hollow and one Straight. The Two forms of Cutter in one Tool make it a handy Spoke Shave

Per Dozen

No. 60—Straight Handle, 10 in. Long, 2⅛ in. Cutter.....$3.00

Weight 3⅞ Lbs. per Dozen

These Shaves have a Cutter and Cap Iron fastened by a Thumb Screw in such a manner as to bring an even pressure on the Cutter edge, and at the same time allow adjustment without the use of a Screw Driver.

DOUBLE IRON, IMPROVED

Per Dozen

No. 61—Raised Handle, 10 in. Long; 2⅛ in. Cutter $3.50

Weight 3¾ Lbs. per Dozen

DOUBLE IRON, IMPROVED

Per Dozen

No. 62—Straight Handle, 10 in. Long; 2⅛ in. Cutter $3.50

Weight 3⅞ Lbs. per Dozen

DOUBLE IRON, LIGHT

Designed for light work; Have Straight Handle and the Cutter and Japanned Cap Iron are fastened by a Thumb Screw.

Per Dozen

No. 64—Straight Bottom, 9 in Long; 1¾ in. Cutter.. ..$2 00

Weight 2¾ Lbs. per Dozen

By means of a Thumb Screw the Mouth can be opened or closed as coarse or fine work may be required

ADJUSTABLE MOUTH

Per Dozen

No. 53—Raised Handle, 10 in. Long; 2⅛ in. Cutter $3.50

Weight 4⅛ Lbs. per Dozen

ADJUSTABLE MOUTH

Per Dozen

No. 54—Straight Handle, 10 in. Long; 2⅛ in. Cutter.....$4.50

Weight 4⅛ Lbs. per Dozen

MILLERS FALLS

The Circular Shape enables it to work in smaller circles than other Styles; the angle of the Knife is such that it Cuts instead of die can be removed for use in Cramped die can be removed for use in Crimped Places

Per Dozen

No. 1—2 in. Cut, Polished Blade, Rosewood Handle; 10 in. Long.....$9.00

Weight 5½ Lbs. per Dozen

STEARNS UNIVERSAL

For all work that can be done with an ordinary Spoke Shave, while its Flexible Spring Bottom allows it to Cut either on the inside or outside of a circle in the same manner as a Spring Bottom, Circular Plane. The Depth of Cut is regulated by the Adjusting Screw; the Cap which sets over the Knife has a curved edge for cross-grained wood, to exclude shavings; Cuts equally well on either Flat, Concave or Convex Surfaces.

Per Dozen

No. 13—2¼ in. Cut; Japanned Iron Frame and Handles; Length 9⅝ in., Width 2⅝ in., Polished Tool Steel Blade $12 00

Half Dozen in a Box; Wt. 12 Lbs. per Dozen

STANLEY UNIVERSAL

Handles are detachable, either can be Screwed into the Top of the Stock, enabling the user to work into corners as no other Spoke Shave can do; One Handle has a Right Hand and the other a Left Hand Thread; This prevents Handles working loose; Two detachable bottoms are furnished, one for Straight, the other for circular work; Metal parts Nickel Plated; Rosewood Handles

Per Dozen

No. 67—2⅛ in. Long; 1⅞ in. Cutter..$18.00

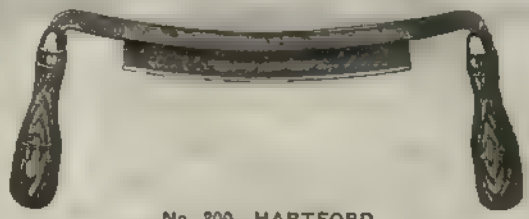
One in a Box

Weight 10 Lbs. per Dozen

DRAWING KNIVES

The No. 100 Zenith is the best selling Draw Knife. It is especially designed with a wide deep bevel which makes the tool convenient to work with because it throws the shavings and chips out of the operators way. The No. 200 Hartford is the same quality, but does not have the extra deep bevel. The No. 150 is the best made Folding Draw Knife, 8 and 9 in. Knives are the best sellers, 14 in. is the best length in a Shingling or Peeling Knife and the No. 114 Zenith and No. 247 are the best sellers.

CARPENTERS'



No. 100—ZENITH

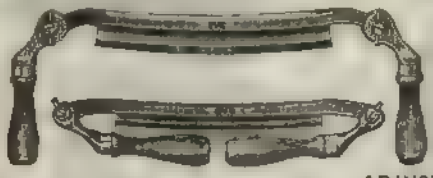
Extra Quality Crucible Tool Steel, Razor Blade Pattern, with Special Fancy Finish; Ebonized Handles; Nickel Plated Caps and Ferrules, Ground and Honed

Length of Blade, In.	7	8	9	10	12
Weight per Dozen, Lbs.	14	15	16	17½	18
Per Dozen	$13 50	13.50	14.40	15.60	18.00

No. 200—HARTFORD

Extra Quality Tool Steel, Razor Blade, Highly Polished, Perfectly Tempered; Stained Cherry Handles, Polished Steel Caps and Ferrules, Ground and Honed.

Length of Blade, In.	7	8	9	10	12
Weight per Dozen, Lbs.	13	13½	14	15	17
Per Dozen	$13.50	13.50	14.40	15.60	18.00



ADJUSTABLE HANDLE, CARPENTERS'

The Handles fold over Edge of Blade fully protecting it from contact with other Tools besides making it very compact for the Carpenters' Chest; Handles held rigid at any angle, by tightening Screws at Joints

No. 150—ZENITH FOLDING

Made from High Grade Crucible Tool Steel; Razor Blade 1½ in. Wide; Deep Bevel; Polished and Tempered; Rosewood Finished Handles; Nickel Plated Ferrule

Length of Blade, In.	8
Weight per Dozen, Lbs.	21
Per Dozen	$24 00

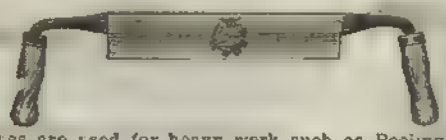
One in a Box

No. 77—FOLDING

Made from High Grade Crucible Tool Steel; Blade 1⅝ in. Wide; Polished and Tempered, Imitation Cherry Handles; Steel Caps and Ferrules, Ground ready for use

Length of Blade, In.	7	8	9
Weight per Dozen, Lbs.	16	17	18
Per Dozen	$18 00	19.80	21.00

Quarter Dozen in a Box



SHINGLING OR PEELING KNIVES

These Knives are used for heavy work such as Peeling and Barking Poles, Shaving Shingles, etc. The No. 114 Zenith is a special design and is popular with all Mechanics using such Knives

ZENITH

Per Dozen

No. 114—Zenith Crucible Steel Blade 14 in. Long, 2½ in. Wide; Plain Beechwood Handles; Knife is Carefully Finished; Well Tempered, Ground and Honed $50.00

Two in a Package; Weight 42 Lbs. per Dozen

STANDARD

Per Dozen

No. 247—This Knife is made up the same as the No. 114 Zenith with the exception that the Blade is only 1¾ in. Wide; An excellent Knife for light work; Fitted with Stained Butternut Handles $39.00

Quarter Dozen in a Package; Weight 25 Lbs. per Dozen

No. 82—WHITE HEADING SHAVES

Used for Shaving and Smoothing Barrel Heads; Made of Laid Steel, Highly Polished and Tempered, Ground and Honed; Walnut Handles.

Length of Blade, In.	10	12	14	16
Weight per Dozen, Lbs.	31	33	39	48
Per Dozen	$37.00	46 00	53.00	61.00

Quarter Dozen in a Package

No. 37—WHITE SHINGLE SHAVES

Used for Shaving and Smoothing Shingles; Made of Laid Steel, Highly Polished and Tempered, Ground and Honed; Walnut Handles.

Length of Blade, In.	12	14	15
Width of Blade, In.	1¾	1¾	1¾
Weight per Dozen, Lbs.	22	24	25
Per Dozen	$36.00	40.00	42 00

Quarter Dozen in a Package

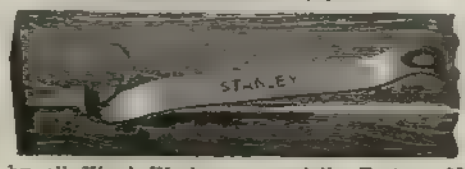
CHAMFER GAUGES

Per Dozen

No. 12—2 in. Scale; Made of Iron and Steel, Nickel Plated; 3½ in. Graduated Bar; Cannot injure the Cutting Edge of the Knife; Fits 1 to 1½ in. Blades; Gauges Angle of Blade and Depth of Cut. $12 00

Quarter Dozen in a Box; Weight 6 Lbs. per Dozen

CORNERING TOOLS



Used by all Wood Workers, especially Pattern Makers, for Rounding Sharp Edges; No Depth Gauge required; Flat Steel, Polished, 6 In. Long.

Per Dozen

No. 28—⅛ and ⅛ in. Cut. $4.80

No. 29—¼ and ⅜ in. Cut. 4.80

Half Dozen in a Box; Average Weight 1½ Lbs. per Dozen

CARBIC FLARE LIGHTS

For Outdoor Use

For Railways, Docks, Foundries, Contractors, Street Work, Dredges, Steam Shovels, Ditching and Threshing Outfits, Miners, Lumber Camps, Summer Resorts, etc.

Approximately 2,000 Candle Power Light at a Cost of About 5 Cents per Hour

1 2 3 5

No. 1—Tank
No. 2—Gas Bell, Riser Pipe Burner and Reflector
No. 3—Coke Holder
No. 4—Strainer
No. 5—Complete Outfit

Carbic is Calcium Carbide treated and compressed into Cakes by a patented process, which prevents waste, it is easily and safely handled and is very economical

COMPLETE OUTFITS

	Each
No. 1—Holds three No. 20 Carbic Cakes and will burn about 9 Hours without recharging; Weight 59 Lbs without Charge . . . Weight 76 Lbs. Charged for Operation	$45 00
No. 2—Holds four No. 20 Carbic Cakes, and will burn about 12 Hours without recharging Weight 63 Lbs without Charge Weight 118 Lbs. Charged for Operation	55 00

CARBIC CAKES ONLY

	Per Drum
No. 20—For Above Flare Lights; 40 Cakes in a Drum..... Weight 108 Lbs. per Drum	$3 00

General Description

These Outfits may be used out of doors wherever a strong light is required, as they will withstand any kind of wind they are especially designed for use where an intense white light of great Range and Radius is desired, an Outfit consists of but three parts and is constructed of heavy galvanized steel and brass; equipped with a Special Aluminum Reflector which may be swung to any desired angle.

The operation is automatic and requires no attention other than recharging with Carbic Cakes for continuous operation. The Outfit is readily transportable and is unaffected by weather or vibration.

Should the light be shut off before exhausting the CARBIC in the Cake Holder, the parts so remaining may be stored for later use, without waste or loss from after generation

The construction is very simple and there are no intricate parts, it is non-explosive and is easy to handle it embodies all that is latest and best in a Flare Light.

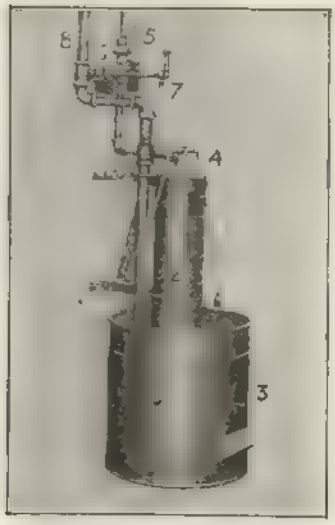
Complete Directions for Operating with Each Outfit

Cold Weather—The water must not be allowed to freeze. Heat caused by generation of gas will keep the water warm enough under most conditions Calcium Chloride may be used in the water, if necessary, to prevent freezing in extremely cold weather A wooden jacket around the Tank, filled with any good insulating material and some common salt in the water will be all that is necessary to protect the light except in very extreme weather When Lamp is exposed to freezing weather always pour the water from the Tank as soon as use of light is discontinued In very severe weather it is well to remove the strainer, putting an ordinary pipe coupling in its place. Replace strainer in warm weather.

CAUTION—Do not have any flame, nor allow any person who is smoking, near the Flare when removing the gas bell after use

CARBIC HOUSE GENERATORS

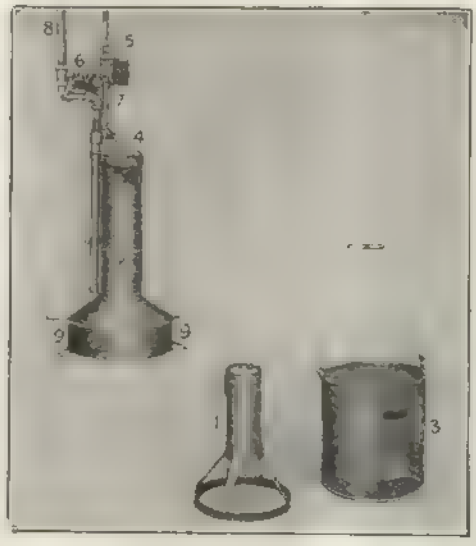
An Efficient, Low Priced Generator for small Farm Houses, Stores, Churches and Public Halls, Cottages, Bungalows, Campers, Lumber Camps, Railway Stations, Shops, etc.; Compact, Simple, Practical and Safe; Easy to Install and Easy to Operate



Shows Generator Charged Ready for Operation.

THE Carbic LIGHT
TRADE MARK

Carbic Cakes are put up in 100 Lb. Drums approximately 75 Cakes in a Drum. See Page 348-1.



Shows Generator Ready to be Recharged.

The Carbic Generator is listed as Standard by the Board of Fire Underwriters; it is made of Galvanized Iron Regalvanized after it is assembled, there are only three Parts; the action is entirely automatic, the alternating pressure of the water and gas does all the regulating without the use of Moving Parts.

Carbic Cakes are used for generating gas; these Cakes are 3x2¾ inches in size and are put up in 100 Lb Drums (about 75 Cakes in a Drum). Four Carbic Cakes and Five Gallons of Water are required for each Charge of the Generator; each Charge will last about five hours with eight Lights and all lights burning continuously and correspondingly longer according to the number of lights in use The production of Acetylene Gas by the Carbic System is simple Safe and Economical and will be welcomed by every one who has been dependent on oil lamps or coal gas for light.

GENERATORS ONLY

(No Piping or Fixtures Included)

	Each
No. 8L—Generator Only; Capacity Eight ½ ft. Burners or equivalent; Height from bottom of Pail to top of Valve 38 in diam 14 in.; main Supply Pipe ¾ in.; Safety Vent Pipe ¾ in.....	.....$50.00

Weight 32½ Lbs Each

	Per 100 Lb Drum
No. 10—Carbic Cakes; about 75 Cakes in a 100 Lb. Drum.....	.... $10.00

For Gas Fixtures, See Page 384.

For Gas Burners, See Page 384

For Black or Galvanized Iron Pipe, See Page 2101

CARBOLITE

A Superior Quality of Calcium Carbide

Carbolite is of an unvarying quality, an important point with consumers, for they can feel assured that in purchasing Carbolite they will always secure the highest Gas Yield Carbolite generates a pure, clean Gas of the very best illuminating power, which produces the White Light known as Acetylene.

In appearance it is a gray ish, rock-like substance which will not burn, cannot explode, is not affected by heat or cold, and in fact remains absolutely inactive until brought in contact with water.

The cost of acetylene for lighting is the equivalent of the best City Gas at 80 cents per 1000 Cubic Feet. Thousands of hotels, club houses and private residences have their individual lighting plants. Along the coast, many light houses use acetylene, the light being preferred to any other by reason of its great penetrating and diffusive qualities. Many of the leading railway systems of the country are adopting acetylene for lighting their passenger cars; Also used in portable lamps on bicycles, automobiles and small pleasure boats, hunting headlights and in portable reading lamps.

FOR GENERATORS AND ACETYLENE WELDING OUTFITS
100 Lb. Drums; Size of Drum 22½x12½ in.

	Per 100 Lbs.
Quarter, ¼x1¼ in.; For Carbide Generators and Welding Outfits	$7.00
Nut, 1¼x⅜ in.; For Generators and Welding Outfits	7.00
Egg, 2 x½ in.; For Generators	7.00
Lump, 3½x2 in.; For Generators	7.00

Weight 107 Lbs. per Drum

MINERS' SPECIAL CARBIDE Per 100 Lbs.

100 Lb. Drums, ⅝ in. to ½ in	$7.00
25 Lb. Drums, ⅝ in. to ½ in	7.00

The **Miners' Special Carbide** is now being extensively used by all the large Iron, Coal, Gold and Silver Mines; It has proven to be by far the best Carbide manufactured for use in Miners' Acetylene Cap Lamps, as the size is specially adapted for this use; It contains no fine material or dust, which is so often the cause of clogged burners

MINERS' SPECIAL CARBIDE
Per Case

10 Lb. Cans; Size of Can 10x5x5 in.; ⅜ in. to ½ in. . $7.50

FOR AUTOMOBILE LAMPS
Per Case

½ in. Size, for Bicycle and Small Automobile Lamps $7.50
1 in. Size, for Large Automobile Lamps 7.50
Six Cans in a Case; Weight 85 Lbs. per Case

DISTRIBUTING POINTS In ordering, select from the following list the city from which quickest delivery and lowest freight rate can be obtained

IOWA—Davenport, Des Moines, Sioux City.
MINNESOTA—Duluth, Minneapolis, Albert Lea.
NEBRASKA—Omaha.
NORTH DAKOTA—Fargo.
WISCONSIN—Madison.

MINERS' SPECIAL CARBIDE
Per Case

2 Lb. Cans; Size of Can 5x3½ in.; ⅜ in. to ½ in $7.00

FOR BICYCLE LAMPS
Per Case

2 Lb. Cans, Size of Can 5x3½ in.; ½ in $7.00
24 Cans in a Case; Weight 63 Lbs. per Case

FOR ACETYLENE TABLE LAMPS
Per Case

Acetylite (Granulated); 10 Lb. Cans; Size of Can 10x5x5 in. . $7.00
Six Cans in a Case; Weight 75 Lbs. per Case

CARBIC CAKES

For Prices, See Pages 248-1 and 348-2

Cans are Sealed with Air-Tight Metal Covers, preventing any deterioration by exposure to air Each Size of Carbolite is best adapted for use in some particular kind of Generator; and, in ordering, the size required should be plainly stated; the consumer should request the Generator manufacturer to furnish him with information as to the proper size of Carbolite to use

Case, Drums or Ton Lots, F. O. B. above Points; Miners' Special and Broken Case Lots, F. O. B. Duluth Only

CAR DOOR LUMBER ROLLERS

OSHKOSH DOUBLE EXTENSION

SIDE DOOR ROLLERS

WERDEN EXTENSION

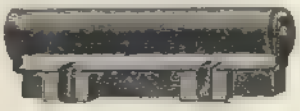
Extends to fit Car Doors from 4 ft. 6 in. to 8 ft. 2 in.	Each
No. 118—Steel Pipe Bar, 18 in. Wood Roller	$13.00

Average Weight 40 Lbs. Each

Extends to fit Car Doors from 4 ft. 8 in. to 7 ft. Wide

No. 48—Bar is made of 2 in. Angle Steel, Steel Tube Roller with Metal Heads, all Malleable Iron Castings; Extension is easily and quickly made; Weight 40 Lbs. Each . . . . . Each $15 00

CAR DOOR LUMBER ROLLERS



END DOOR ROLLERS

No. 12—Length Over-all, 14 in; Length of Roll, 12 in.; Steel Tube Roller, with Hardwood Frame, Iron Bound; Secured to Door Sill by Heavy Clamps . . . . . Each $7.50

Open Stock; Weight 14 Lbs. Each

TIMBER TRUCKS OR DOLLIES

No. 7—Hardwood Frame, 17x19 in. of 2½ in. Rock Maple; Cast Iron Roller 6x10 in., Weight 31 Lbs. Each $8.00 Each

No. 651—Steel Frame, 15x17 in.; Cast Iron Roller, 6x10 in. . . . . Each $12 50

Weight 46 Lbs. Each

BOOT CALKS

000 00 0 1

COMMON, LUFKIN

Bright, Beaded; Forged from Best Quality Crucible Steel

A Pair of Boots takes 100 Calks, 40 in each Sole and 10 in each Heel. Applied with Calk Sets shown below the 00 Size is used in walking boots by Cruisers, Sportsmen, Miners, etc.

Nos.	000	00	0	1
Length, In.	½	¾	⅞	1
Weight, Lbs., per 1000	2¾	3	3¼	4¼
Per 1000	$7.50	7.50	7.50	7.50

100 in a Box; 1000 in a Carton

00 4 5 7 8

LIPSCOMB WING SCREW CALKS

Best Tempered Steel

For Loggers, Hunters, Woodsmen, Ice Cutters, the various sports, for icy weather, and for any purpose requiring a roughened sole. Can be easily inserted or removed with the special wrench. Does not pull out nor work into the foot. Always held upright by broad disc, which prevents bending in wet or inferior leather. 50 of these Calks will give safer service than 125 driven Calks.

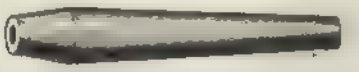
Nos.	00	4	5	7	8
Length In.	⅛	⅝	¾	⅞	1
Weight Lbs., per 1000	5	5½	6	6¼	6¾
Per 1000	$15.00	15 00	15.00	15.00	15.00

50 in a Box; 500 in a Carton

Note—We will always send Lufkin Calks unless otherwise specified.

CALK SETS

For Common Calks Shown Above



No. 185—Set only; Length 2⅛ in., Polished Steel . . . . . Per Dozen $3.50

One Dozen in a Box; Weight 1¼ Lbs. per Dozen

No 190—Combination Set and Punch; Length 4⅛ in. Polished Steel . . . . . Per Dozen $4 50

One Dozen in a Box, Weight 2 Lbs. per Dozen

LOG STAMPS OR MARKING HAMMERS

For marking Name, Initials or Private Mark on the ends of Logs Cast Steel, with from Two to Six Double Face Letters, 3 in. High, Size of Eye ⅞x⅝ in., without Handle, takes Common Sledge Handle Each $2 00

Add $3.50 Net for Cost of Each Pattern

Weight 3 Lbs. Each

Specify whether Single or Double Face is wanted.

CALK SETTING TOOLS

For Lipscomb Calks Shown Above

BRACE

No 01—Polished Cast Steel, 7½ in. Long . . . . . Per Dozen $4 00

Half Dozen in a Box; Weight 5 Lbs. per Dozen

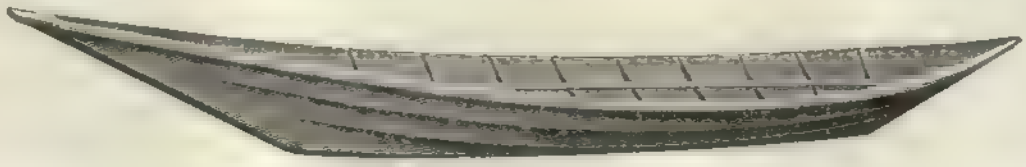
WRENCH

No. 02—Used as a Wrench, with the Bar, and is very Handy to Carry in the Pocket, can also be used in a Common Bit Brace Blued Steel, Length 3 in. . . . . Per Dozen $3.00

One Dozen in a Box; Weight 1¼ Lbs. per Dozen

DRIVING BATTEAUX

FOR FACTORY SHIPMENT ONLY; SHIPPED KNOCKED DOWN TO SECURE LOWEST FREIGHT RATES



For use of Lumbermen and Contractors in Log Driving, Pond and Construction Work where necessary to transport men, Material, etc., it will carry large, heavy loads and is easy to handle in swift, rough water. Built of good, sound White Pine, the Bottom 1⅛ in. Thick, the Sides ¾ in. thick, the Knees or Ribs are Oak sawed to shape from Natural Crooks.

The small size or Three Strake (three boards high) will carry 12 to 18 Men and Driving Kit; the Four Strake (four boards high) will carry 15 to 26 Men and Driving Kit.

	Each
No. 332—Three Strake, 32 ft. Long, Weight 350 Lbs.	$ 95.00
No. 432—Four Strake, 32 ft. Long; Weight 390 Lbs	100.00
No. 434—Four Strake, 34 ft. Long; Weight 400 Lbs	110 00
No. 436—Four Strake, 36 ft. Long; Weight 430 Lbs	125 00

Shipped Knocked Down to Secure Lowest Freight Rates; 34 and 36 foot Batteaux are built to order only

MAPLE BATTEAU PADDLES

Selected Straight Grain Rock Maple, Blade Tipped and Pointed with Steel

	Each
No. BM7 —Length 7 ft.; Weight 4¾ Lbs. Each	$5 00
No BM7½—Length 7½ ft.; Weight 5 Lbs. Each	5.00

CAPSTANS

COMBINED CLEAT OR CAVEL AND HAND CAPSTAN

Indispensable in handling and managing tow lines on boats or barges; for a side tow, place one at the bow and one at the stern; for a bow tow (or pushing) use one for each line forward; will haul up anchors of from 500 to 800 Lbs. Is frequently used to haul small craft and barges out on the ways and very useful when placed at suitable intervals along docks or wharves or about boat yards; requires but little space, and affords a sense of security which is well worth their cost. Secure to deck by four bolts through hardwood plank, spanning two or more beams below; single purchase and revolve with the sun. Slack in line can be taken up at once; if there is too much slack, take in by hand, then relay the line on the horns, the same as on a Cleat or Cavel and it is ready to haul up taut. The levers for these capstans are usually made of one and one-half inch wrought iron pipe, about four feet long.

	Each
No. 1—Height 17½ in.; from Tip to Tip of Horns, 16½ in.; Base 14½ in. Diam.; Skirt 11½ in. Diam.; Neck of Spool 5 in. Diam.	$20.00

Weight 110 Lbs. Each

ANCHORS

Japanned Wrought Iron, Solid Stock, and Flukes, Sliding Bar

	Per Pound
Weight 20 Lbs. Each	$0 22
Weight 25, 30, 40, 50, 60, 70, 80, 90, 100 120, 130 to 150, 150 to 180, 180 to 200, 250 Lbs. Each	20
Weight 300 Lbs. Each	20

GALVANIZED FOLDING ANCHORS

Stock and Flukes both fold up and are held open or closed by the same Pin; very compact, for stowage on Deck or elsewhere

Weight, Lbs.	4	6	8	10	12	16	20	25
Length, In.	17	19	22	23	25	28	30	33
*Each	$2.50	3 00	4.00	5.00	6.00	7.00	9.00	10.40

Open Stock

CAST IRON ELECTRIC FIXTURES

For Porches and Outside Use

Prices do not include Sockets, Globes or Wiring

ELECTRIC PORCH BRACKETS — Each

No. 2833—Cast Iron, Black Finish; Length 15½ in. Over-all; Distance from Back of Canopy to Center of Globe 7 in.; For Globe with 4 in. Fitter Only $9.00

Weight 8¾ Lbs. Each

ELECTRIC PORCH BRACKETS — Each

No. 2834—Cast Iron, Black Finish; Length 13 in. Over-all; Distance from Back of Canopy to Center of Globe 6 in.; For Globe with 4 in. Fitter Only.....$10.00

Weight 11 Lbs. Each

ELECTRIC PORCH BRACKETS — Each

No. 2831—Cast Iron, Black Finish; Length 6½ in. Over-all; Distance from Back of Canopy to Center of Globe 7¼ in.; For Globe with 4 in. Fitter Only $4.00

Weight 6½ Lbs. Each

ELECTRIC PORCH BRACKETS — Each

No. 2836—Cast Iron, Black Finish; Length 10¼ in. Over-all, Distance from Back of Canopy to Center of Globe 6½ in., For Globe with 3¼ in. Fitter Only $3.50

Weight 4¾ Lbs. Each

CEILING CROWNS — Each

No. 24—Cast Iron, Black Finish; For Globe with 3¼ in. Fitter Only, Globe Not Included $0.40

Weight 1 Lb. Each

ELECTRIC PORCH BRACKETS — Each

No. 2835—Cast Iron, Black Finish, Length 6¼ in. Over-all, Distance from Back of Canopy to Center of Globe 6 in. For 3¼ in. Fitter Only .$2.50

Weight 7 Lbs. Each

ELECTRIC LIGHT DOMES

OPEN TOP DOME

Each

No. 3053—Eight Panel Dome; Top Panels, Amber; Bottom Panels, Amber and Green, Wired Complete with Four Chain Pull Sockets, Length 60 in., Width 25 in.; Depth 12 in., Fixture Brush Brass and Black Finish $30 00

Weight 20 Lbs. Each

CLOSED TOP DOME

Each

No. 3043—Eight Panel Dome; Top Panels, Amber; Bottom Panels, Amber and Green, Wired Complete with Four Chain Pull Sockets, Length 60 in., Width 25 in.; Depth 12 in.; Fixture Brush Brass and Black Finish $30 00

Weight 20 Lbs. Each

No. 3050—Eight Panel Amber Dome wired complete with four chain pull Sockets, Length 42 in Shade 22 by 11 in.; Fixture furnished complete with Canopy same as cuts below, Brush Brass and Black Finish $28.00

Weight 15 Lbs. Each

CHAIN PIPE WRENCHES OR TONGS

VULCAN-BIJAW, FLAT LINK

Wrought Steel Handle, Drop Forged, Double-Ended Reversible Jaws, Saw Temper Teeth; can be sharpened with a file; Hand Made Chain, of special steel, swings from the center and can be used on either side of the Jaws, work on straight pipe or fittings,—in corners against walls, between floors, in ditches, etc.

Size Nos	31	32	33	33½	34	35
Takes Pipe, In	⅛ to 1½	¼ to 2½	⅜ to 4	1 to 6	1½ to 8	2 to 12
Length, Over-all, In	20	27	37	44½	50½	64½
Length of Chain, In	15½	17½	22½	31	39	54½
Breaking Strain, Lbs	6,700	9,800	12,500	14,300	15,700	21,600
Weight Each, Lbs	5¾	10	16	24	31	50
Each	$3.50	5.00	7.00	9.00	11.00	18.00

Above Wrenches can be supplied with Cable Link, instead of Flat Link Chain, when so ordered

EXTRA PARTS FOR VULCAN-BIJAW WRENCHES

CHAINS, FLAT LINK

For Size Nos	31	32	33	33½	34	35
Weight Each, Lbs	1½	2	2½	5	7	13½
Each	$1.00	1.50	2.50	3.50	4.50	7.50

CHAINS, CABLE LINK

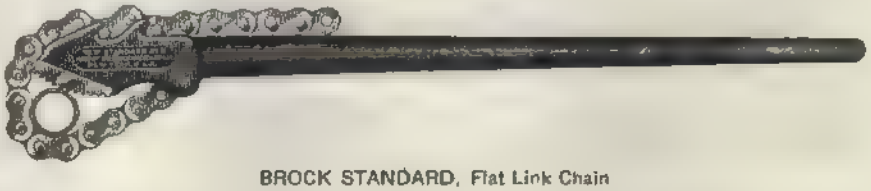
For Size, Nos	31	32	33	33½	34	35
Weight Each, Lbs	1½	2	2½	5	8	14½
Each	$1.00	1.50	2.50	3.50	4.50	7.50

JAWS

For Size, Nos	31	32	33	33½	34	35
Weight Pair, Lbs	2	2¼	3¼	4½	6	8½
Per Pair	$1.75	2.75	4.00	4.75	5.50	7.50

NUTS AND STUDS

For Size, Nos	31	32	33	33½	34	35
Per Set						
2 Studs and 4 Nuts	$0 25	.35	.45	.55	.70	.90



BROCK STANDARD, Flat Link Chain

Drop Forged, Bar Steel Handle and Chain; Interchangeable Jaws with three rows of hardened tempered Teeth; Jaws are Inserted in Head will not pull off; Chain is quickly adjusted.

Size Nos	2	3	3½	4	5
Takes Pipe, In	¼ to 3	¾ to 6	1 to 8	1½ to 10	2 to 14
Length Over-all, In	27	37	44	50	64
Length of Chain, In	17½	22½	31	39	54½
Breaking Strain, Lbs	9,800	12,500	14,300	15,700	21,600
Weight Each, Lbs	8	16	21	28	45
Each	$5.00	7.00	9.00	11.00	18.00

EXTRA PARTS FOR BROCK STANDARD

CHAINS

For Size, Nos	2	3	3½	4	5
Weight Each, Lbs	1½	4	5	6	11
Each	$1.50	2.50	3.50	4.50	7.50

JAWS

For Size, Nos	2	3	3½	4	5
Weight Each, Oz	7	10	11	14	23
Each	$1.40	2.00	2.00	2.75	3.50

BROWN ADJUSTABLE

Solid Steel, Oil Finish; The Hooked Jaw is Hand Forged and has a perfectly Flat, Full Bearing on the Pipe, the entire width of its inside surface; The Short or Dog Jaw, is faced with tool steel and made sufficiently long to allow being reground many times without reducing the Pipe Holding Capacity

Nos	1	1½	2	3	4	5
Takes Pipe, In	⅛ to ¾	⅜ to 1	½ to 1¼	1 to 2	1½ to 3	2½ to 4
Length, In	14	17	20	25½	37½	44
Weight Each, Lbs	2½	4	6	10½	22	30
*Each	$1.20	1.50	1.70	2.40	5.40	12.00

	Each		Each
Extra Bolts and Nuts, for No. 3	$0.50	Extra Adjusting Screws, for No. 3	$0.30

Open Stock

PIPE WRENCHES

Polished Head and Jaws; Japanned Handle Drop Forged from Bar Steel; All Parts Interchangeable

Does not Lock upon the Pipe but Releases its hold readily. Does not Crush the Pipe nor Slip. The Movable Jaw and the Nuts are made with a Round Top and Bottom Thread and will not Strip nor Bind. An Inserted Jaw in the Handle allows both to be removed at little expense. Has Unbreakable Steel Frame. Nut Guards are Furnished in All Sizes for Keeping Wrench in Adjustment in Close Quarter Work.

No. 125—TRIMO, ALL STEEL

Length Open, In.	6	8	10	14	18	24	36	48
Takes Pipe	⅛–½	⅛–¾	⅛–1	¼–1½	¼–2	¼–2½	½–3½	1–5
Weight Each, Lbs.	½	¾	1½	2¾	4½	8	16	24
Each	$2 00	2.25	2 50	3 50	5 00	7.25	13 50	20 00

6 to 24 in., Six in a Box; 36 and 48 in., Two in a Box

No. 150—TRIMO, WOOD HANDLE

Length Open, In.	6	8	10	14
Takes Pipe	⅛–½	⅛–¾	⅛–1	¼–1¼
Weight Each, Lbs.	½	¾	1½	2½
Each	$2 00	2.25	2 50	3 50

Six in a Box

EXTRA PARTS FOR TRIMO WRENCH

Price Each

For Wrench, In.	6	8	10	14	18	24	36	48
Movable Jaw	$0 75	80	85	1 15	1 75	2 25	4 35	7 50
Nut	12	15	20	30	35	55	1 10	1 50
Nut Guards per Pair	15	15	20	30	.35	45	.55	65
Inserted Jaw	35	40	50	60	.70	80	1 10	2 00
Frame	38	42	50	60	75	95	1 70	2 20
Springs	03	03	03	03	04	04	04	04
Frame Pins	03	03	04	04	04	04	05	05
Jaw Pins	03	.03	.04	04	.04	.04	.05	05

No. 643—PERFECT HANDLE

Drop Forged Steel; Waterproof Wooden Handles Locked in and Riveted, the Handle is stronger than plain Steel and is Comfortable in hot or cold weather. The Swell at the end admits of the greatest Leverage without danger of hand slipping off, the Spring is protected the Movable Jaw is a Drop Forging

Length Open, In.	8	10	14	18
Takes Pipe, In.	⅛–¾	⅛–1	¼–1½	¼–2
Weight Each, Lbs.	¾	1½	3¼	5¼
Each	$2 00	2 50	3 50	5.00

Jaws and Nuts Interchangeable with Trimo

Open Stock

STILLSON

Drop Forged from Bar Steel; All Parts Interchangeable, Does not Crush nor Lock upon the Pipe, but releases its hold instantly; Takes anything Round, Square or Hexagon

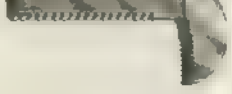
No. 135—Lengths 6 to 14 in., with Hardwood Handle

Length Open, In.	6	8	10	14
Takes Pipe, In.	⅛–½	⅛–¾	⅛–1	⅛–1½
Weight Each, Lbs.	½	⅝	1¼	2½
Each	$2 00	2 25	2 50	3.50

No. 140—Lengths 18 to 48 in., All Steel

Length Open, In.	18	24	36	48
Takes Pipe, In.	¼–2	¼–2½	¼–3½	1–5
Weight Each, Lbs.	4½	8	14½	22
Each	$5 00	7.25	13 50	20.00

6 to 24 in., Six in a Box; 36 in., Two in a Box



EXTRA PARTS FOR STILLSON WRENCHES

JAWS

For Wrenches, In.	6	8	10	14	18	24	36	48
Each	$0 75	80	.85	1.15	1.75	2.25	4 35	7.50

FRAMES AND NUTS

For Wrenches, In.	6	8	10	14	18	24	36	48
Frames, Each	$0.38	.42	.50	.60	.75	.95	1.70	2.20
Nuts, Each	.12	.15	.20	.30	.35	.55	1.10	1.50

No. 130—COCHRAN

Polished Head and Jaws, Japanned Handle; Has no Pins to break or spread and will not Lock or Crush a Pipe; Frame and Handle are One Piece; Jaws all made of Best Grade Tool Steel, Strongly Reinforced; No small parts to keep together; Rocker in place of ordinary Frame Pin; Releases instantly when pressure is removed

Length Open, In.	6	8	10	14	18	24	36
Takes Pipe, In.	⅛	½	½	¾	⅛ 1	¼–1½	¼–2	¼–2½	¼–3½
Weight Each, Lbs.	½	¾	1½	3	6	9½	16
Each	$2 00	2.25	2 50	3 50	5 00	7 25	13.50

6 to 24 in., Six in a Box; 36 in., Two in a Box

EXTRA PARTS FOR COCHRAN WRENCHES

The following Five Simple Parts make up the Wrench

Price Each

For Wrench, In.	6	8	10	14	18	24	36
No. 1—Hook Jaws	$0.67	.67	.75	1.00	1.33	2.00	4.00
No. 1—Inserted Jaws	.25	.25	.33	.50	.55	65	1.00
No. 3—Rockers	26	26	.28	.40	.50	.65	1.30
No. 4—Nuts	.20	.20	.28	.35	.42	.55	.65
No. 5—Springs	.12	.12	14	.17	.21	.25	.40

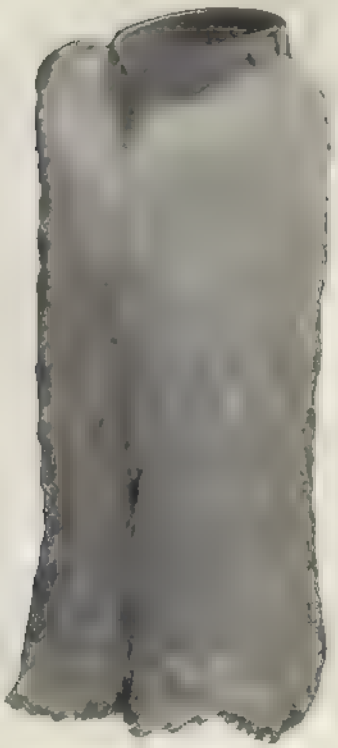
Open Stock

CHAPS

Length of Legs from 28 to 34 in.

In Ordering Always Give Waist and Inside Leg Measurement

We have the following Colors of Angora Skins in Stock and can make any Grade of Chaps to order in these Colors
Orange, Purple, Pink, Blue, Green, Lemon Yellow or Brown



ANGORA CHAPS

First Selection Skins, Chrome or Glove Leather Backs

HAND FLOWER STAMPED BELTS

	Per Pair
No. 1—Black	$3 00
No. 2—White	32 00
No. 3—Gold	33 00
No. 4—Red	33.00

Weight 7 Lbs. per Pair

HAND BASKET STAMPED BELTS

	Per Pair
No. 5—Black	$30.50
No. 6—White	29 50
No. 7—Gold	30 50
No. 8—Red	30 50

Weight 7 Lbs. per Pair

Second Selection Skins, Chrome or Glove Leather Backs

BORDER STAMPED BELTS

	Per Pair
No. 9B—Black	$28.00
No. 9W—White	27.00

Weight 7 Lbs. per Pair

OIL GRAIN CHAPS

Chap Leather, in Hand Basket Stamped Belts, Buckskin Laced around Bottom, Pockets and Belt; Laced Leg with Fringe.

	Per Pair
No. 10—With Nickel Conchas	$32 00
No. 11—Without Conchas	30 00

Weight 6½ Lbs. per Pair

	Per Pair
No. 11C—Made of Soft Brown Chap Leather, Otherwise same as No. 11	$31.00

Weight 5¾ Lbs. per Pair

	Per Pair
No. 12—Made of Oil Grain Chap Leather; Border Stamped Belt. Thread Sewed; Laced Leg.	$25.00

Weight 5¾ Lbs. per Pair

SPOTTED ANGORA WING CHAPS

The Spots are stitched over the Fur on the main pelt in such a way that they can be removed without in the least injuring the usefulness of the Chaps.

Any Combination of Colors

Flower Stamped Belt

	Per Pair
No. 100—White	$49.00
No. 100B—Black	50.00
No. 100X—Colors	50.00

Basket Stamped Belt

	Per Pair
No. 105—White	$47.00
No. 105B—Black	48 00
No. 105X—Colors	48 00

Weight 12 Lbs. per Pair

ANGORA WING CHAPS

Without Spots; Flower Stamped Belt

	Per Pair
No. 110—White	$43 00
No. 110B—Black	44 00
No. 110X—Colors	44.00

Basket Stamped Belt

	Per Pair
No. 115—White	$41.00
No. 115B—Black	42.00
No. 115X Colors	42 00

Weight 12 Lbs. per Pair

SPOTTED ANGORA CHAPS

Flower Stamped Belt

	Per Pair
No. 120—White	$36 00
No. 120B—Black	37 00
No. 120X—Colors	37 00

Basket Stamped Belt

	Per Pair
No. 125—White	$34 00
No. 125B—Black	35.00
No. 125X—Colors	35.00

Weight 7 Lbs. per Pair

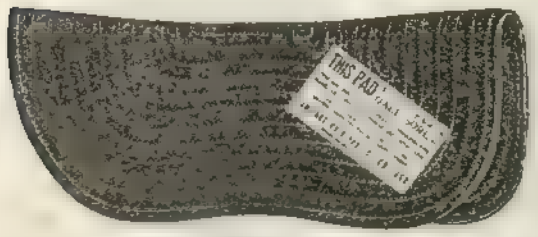
ANGORA CHAPS

With Soft Leather Top; Basket Stamped Belt

	Per Pair
No 150W—White	$29 00
No. 150B—Black	30.00
No. 150X—Colors	30.00

Weight 6 Lbs. per Dozen

SADDLE BLANKETS

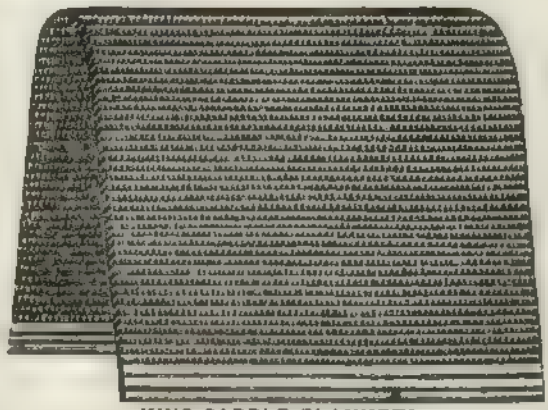


HAIR SADDLE BLANKETS

Thick Sanitary Hair Cloth; Stitched with 6-Ply Linen Thread at ⅞ in. Intervals; These Pads Positively Cure Gall Sores; Air Circulates Freely Through the Hair; Nature Does the Healing.

Directions—Place Piece of Cotton Cloth or Burlap between Pad and Sore until Pus Ceases to Flow; Cleanse frequently with water.

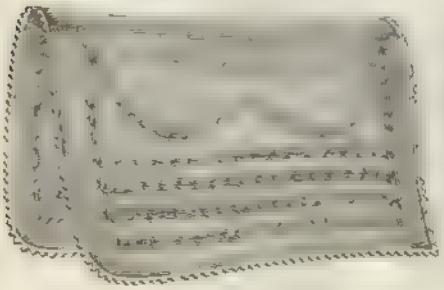
	Per Dozen
No. 12—Size 22x28 in.; Oregon Shape; With Round Corners; Weight 34 Lbs. per Dozen	$56.00
No. 7—Size 28x30 in.; Regular Shape; With Square Corners. Weight 36 Lbs. per Dozen	60.00



KING SADDLE BLANKETS

Guaranteed Pure Hair; An Excellent Blanket for Stockmen and General Use; It is cooler than any Saddle Blanket made; Will Shape itself to Horse's Back; It can be Washed and Kept Clean and will not Gall a Horse.

	Per Dozen
No. 13—Regular Size, 27x36 in.; Weight 38 Lbs. per Dozen	$28.50

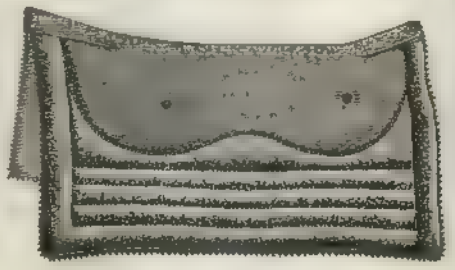


FELT SADDLE BLANKETS

Face of Pad is Fawn Felt; Top or Back, Heavy Drill, Blue Color; Pinked Felt Edges, Composite Stuffing; Space in Center is Left Open or Unstuffed; It possesses all the merits of a Felt Saddle Housing and a Stuffed Pad combined. The thickness is sufficient to guarantee against any injury by the saddle, while the stuffing used insures complete absorption of the perspiration

	Per Dozen
No. 12K—Size 26x34 in.	$32 80

Weight 48 Lbs. per Dozen



PADGITT REVERSIBLE SADDLE BLANKETS

Size 20x30 in.; Use either Side on Horse; Heavily Padded

	Per Dozen
No. 1P—Duck Top, Assorted Bright Colors; Underside Orange Felt, Pinked Felt Edges	$37.20
Weight 60 Lbs. per Dozen	
No. 2P—Duck both Sides; Assorted Bright Colors, Pinked Felt Edges	28 00

Weight 48 Lbs. per Dozen

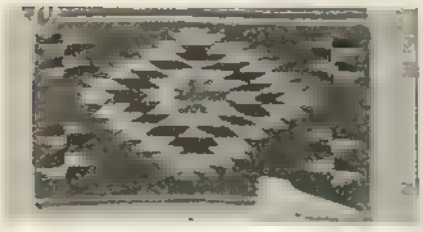
FELT SADDLE BLANKETS

Made of Old Gold Drill, Excellent Quality, a strip of Red Felt (not pinked) inserted in and extending around the outer edge gives the Pad a handsome and finished appearance.

	Per Dozen
No. 2W—Size 26x32 in.	$15.60

Weight 37 Lbs. per Dozen

NAVAJO SADDLE BLANKETS



GENUINE INDIAN NAVAJO SADDLE BLANKETS

Assorted Patterns and Colors

	Per Lb.
*No. NB—Size, about 30x60 in.; Weight 5½ to 6 Lbs.	$2.00

FOLDING SADDLE BLANKETS

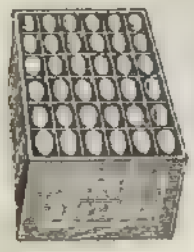
Fold to Any Size Desired; Used Mostly with Stock Saddles; Can Be Used as a Saddle Blanket During the Day and as a Bed Blanket at Night

	Each
*No. 2—Size 144x54 in.; Gray, with Red Heading Stripes	$2 40
*No. 4—Size 25x81 in.; Red Ground, Olive, Maroon and White Plaid	5.20
No 100—Size 36x60 in.; Red Body, Red, Yellow and Black Rectangular Squares	5 60
No. 200—Size 36x60 in.; Brown Body, Red, Yellow and Gray Rectangular Squares	5 60
No. 201—Size 36x66 in.; Wine with Green, White and Blue Stripe	4.30
No. 202—Size 36x60 in., Blue with Green, Red and Blue Stripe	3.90
No. 203—Size 36x60 in.; Gray with White, Black and Yellow Stripe	2.90
No. 204—Size 36x60 in.; Blue with Green, Red and White Stripe	2.60
No. 205—Size 36x66 in.; Gray with Red and Black Stripe	2.00

Weight, About 3 Lbs. Each

*Carried at Portland Only

GLASS NEST EGGS



Per Gross

No. 144—Best Opal Glass, Size 2½x1¾ in. $3.00

One Gross in a Carton

FLY KILLERS

Per Dozen

Wonder—Contains Poison; Lasts Entire Season; Diam. 4¼ in., Blue Enameled Tin; Weight 1⅓ Lbs. per Dozen $2 00

One Dozen in a Box

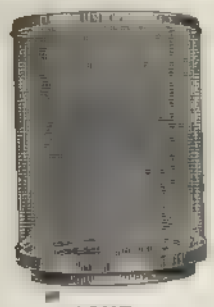
FLY PAPER

TANGLEFOOT

9x16 in. Sheets; Impossible for Flies or Insects to extricate themselves from the sticky surface

Per Envelope, 5 Double Sheets in Sealed Envelope $0.15
Per Carton, 10 Envelops..... 1.40
Per Box, 5 Cartons..... 6 50
Weight 28 Lbs. per Case

FLY TRAPS



ACME

Per Dozen

Acme—Heavy Tin Top, Bait Pan and Stays; Heavy Painted Wire Cloth; Cone and Body are separate; the Cone is edged with rolled Tin Band, the outside forming a shoulder which fits the Body, preventing dislodgement when set.... .$3.00

One Dozen in a Case
Weight 4 Lbs. per Dozen

SURE CATCH

Per Dozen

Sure Catch—Height 5 in., Diam. 5 in.; Tin Base and Rim; Blued Wire Cloth Body; Easily taken apart; Weight 4 Lbs. per Dozen . . $3 50

One Dozen in a Carton

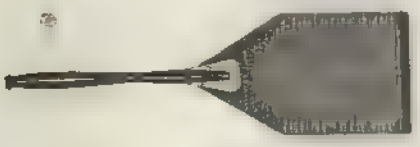
OUT-DOOR

Per Dozen

No. 20—Large Size; Height 12½ in., Diam. 11½ in.; Green Wire Screen, Reinforced by Heavy Tin around the Bottom, Top and Sides; Weight 21 Lbs. per Dozen... . . . $15 00

Half Dozen in a Carton

FLY SWATTERS OR KILLERS



KING

Per Dozen

King—Length 17 in., Width 4¾ in.; Black Screen Wire Brush; Black Enameled Handle; Riveted and Re-inforced at Connection $2 00

One Dozen in a Box
Weight 1¾ Lbs. per Dozen

BROOM

Per Dozen

No. 10—Length 15 in.; Black Enameled Handle, Steel Wire Brush, Wire Ferrule, Handle will not Bend, Break our Get Loose $2.50

One Dozen in a Box
Weight 1¾ Lbs. per Dozen

QUEEN

Per Dozen

Queen—Size of Wire Cloth 4¾x9 in., bound with Black Felt; securely fastened to Black, Enameled Wood Handle, no rough edge $2 00

One in an Envelope; One Dozen in a Carton
Weight 1¾ Lbs. per Dozen

PERFECT

Per Dozen

Perfect—Length 16 in.; Width 5 in Black Screen Wire Brush; Copper Wire Handle $0 75

One Dozen in a Box
Weight 1¾ Lbs. per Dozen

CHICKEN BROODERS

Hot Air Heat; For Indoor or Outdoor Use

Made of the best material, is large and roomy, Floor Elevated off the ground one inch which insures a dry Floor; The Top is coverd with galvanized iron, and is so constructed that it is rain and snow-proof and cannot leak; The large top Door is fastened by hinges so that it can be raised and all parts of the Brooder gotten at conveniently for cleaning or other purposes; The Brooder is heated by overhead hot air heat pipes made of galvanized iron. The lamp and heater are separate from the Brooder, are constructed so that they will work satisfactorily out of doors and are fire-proof

The Brooder is divided into two compartments. The Hover which is directly under the heating pipes and the exercise room in front next to the glass windows. The two compartments are separated by a heavy felt curtain. The chicks go into the Hover to get warm the same as they do when they go under the old hen in the natural way. The Incubator is well finished, Well manufactured and will last indefinitely. Only first class lumber is used in its construction.

Nos.	Capacity	Floor Space	Weight	Each
1	75 Chicks	18x22 in.	65 Lbs.	$14.00
2	100 Chicks	24x30 in.	85 Lbs.	17.00
3	200 Chicks	32x34 in.	110 Lbs.	20.00

HENS' NESTS

GALVANIZED IRON

Sanitary, light and airy; Cheaper and better than a Wooden Nest; Lice can not live in a Metal Nest.

Each

No. 2—Size of Each Nest 11x10 inches; Length Over-all 36 inches; Weight 100 Lbs. per Dozen.....$1.50

Six in a Crate, Knocked Down

POULTRY FOUNTAINS

IMPROVED

The Pan will fill and keep full Automatically without Overflowing; No Danger of Drowning Chickens; The Water is Always Clean and Fresh; Strongly Made and will not Rust.

Nos.	11	12	14	18
Cap., Qts.	1	2	4	5
Wt. Doz., Lbs.	7½	8¼	12½	20
Per Dozen	$3.00	3.70	5.50	7.70

Open Stock

ECONOMY

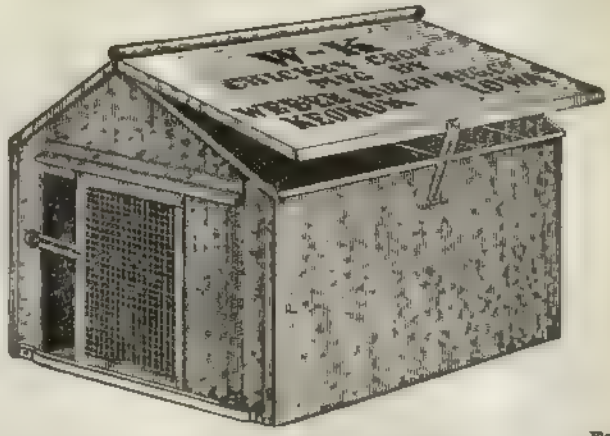
A Common Mason Fruit Jar of any capacity is screwed into the threaded Ring in the Center of the Pan, allowing the Water or Feed to Automatically enter the Pan, supplying Clean, Fresh Water at all times.

Per Dozen

No. 10—Galvanized Iron; Diam. 6 in., Height 1½ in.; Glass Jar is not included.$2.50

Two Dozen in a Crate
Weight 5 Lbs. per Dozen

CHICKEN COOPS



Each

No. 100—Size 18x24 in. by 17 in. High; Weight 13 Lbs. Each..$2.50

Six in a Crate, Knocked Down

Galvanized Iron Coops won't rust, and will last a lifetime.

It is Rat, Weasel, Mink and Skunk proof; and Mites cannot live in an iron house

It is dry and won't absorb moisture.

It is easily cleaned and is perfectly Sanitary.

It is put together in grooves and slides, and is held solid simply by two small bolts, which may be removed and the coop taken apart in a few seconds. The bottom simply slides in and may be removed and cleaned without lifting the coop, disturbing the chickens or soiling your clothes.

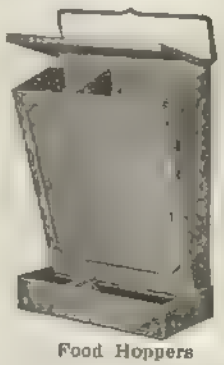
The openings are closed by two doors; one solid and one for ventilation. In the solid door is a small opening for young chicks —a door within a door—and it's all simplicity simplified. With the screen door a circulation is secured through the ventilators that makes hot nights cool, while the ventilators are perfectly rain-proof. One side of the coop opens like a lid and turns the coop into a model nest; while the lid only partially raised makes a double ventilation when needed.

Large enough for a Hen and 25 Chicks.

Directions for Setting up Coop

Slip the Sides and Ends in place, put in the two Bolts and Screw them up Tight. Then Slip in the Bottom from the Rear End tight up against the Door, then Slide on the Short Side of the Top and follow this with the Larger or Front Part of Roof.

POULTRY FEED AND GRIT HOPPERS OR BOXES



Food Hoppers

Dry Grit Boxes

One of the handiest, most convenient and economical arrangements made for feeding Poultry, the contents are kept clean and free from dirt at all times and there is no chance for waste; Strongly made of Galvanized Steel, with Handle for carrying.

FOOD HOPPERS

Per Dozen

No. 2—Two Compartments; Height 12 in., Width 8¾ in., Depth Front to Back at Top 4 in.; Feed Compartments are 1½ in Deep $13.00

DRY GRIT BOXES

Per Dozen

No. 3—Three Compartments; Otherwise same as above; for Grits, Oyster Shells, Ground Bone or Dry Feed..... $13.00

Open Stock; Weight 22 Lbs. per Dozen

CIRCULAR RADIATORS

CIRCULAR

Showing Circular Radiator, 1, 2, 3 and 6 Columns only
Mostly used in Lobby of Hotel, in Aisles of Stores, etc., around supporting Columns.

EXTRAS

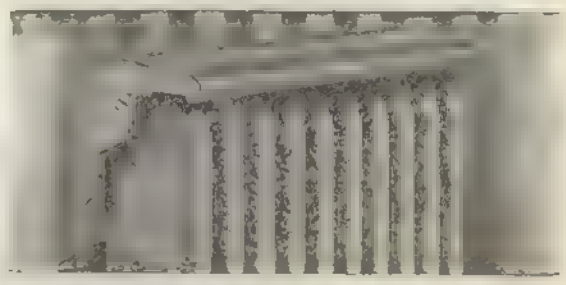
FOR STEAM OR WATER

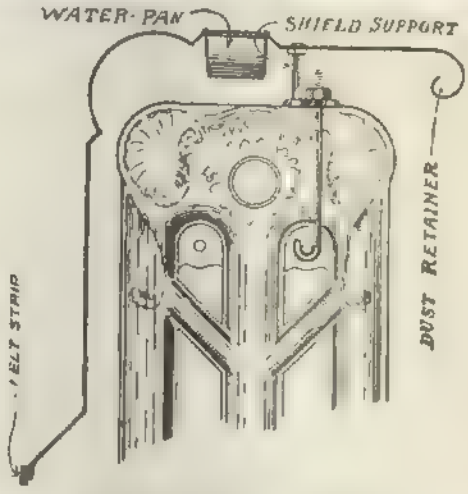
Add to the price of regular Direct Radiator of 1, 2, 3 and 6 Col.
CURVED, Add $15 50 per Radiator, plus 54 cents per Section
CIRCULAR, Add $12 00 per Radiator, plus $1 40 per Section
WINDOW, Add $15.50 per Corner

LEGS, either Higher or Lower than regular heights indicated in Catalog, and Radiators without Legs will be charged the following price per Leg Section.....$1.06
Per Pair

SADDLES for all Radiators, Steam or Water; Used for holding Marble or Cast Iron Radiator Tops in place..... $1.00

RADIATOR SHIELDS





Showing Method of Attaching

Radiator Shields protect Walls,. Draperies and Furniture from becoming soiled with dust rising from the Radiators. When used with Water Pan they also make the Atmosphere more Heathful and Comfortable as they supply the Necessary Moisture to the Air.

Made of Corrugated Galvanized Iron with Ornamental Cast Ends, Simple and Positive Fastening and Adjustment; Supplied with Felt Strip that fits close against wall; Has Gutter Shaped Dust Retainer Front, which is convenient and easily cleaned; Detachable Concealed Copper Water Pan, which comes in contact with the Hottest Surface of Radiators, thereby Evaporating a Sufficient Amount of the Water to Supply the Necessary Moisture to the Atmosphere.

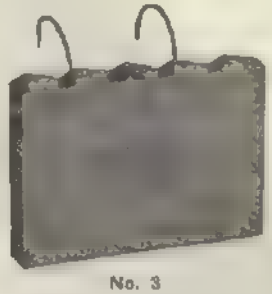
SAVO AIR MOISTENERS

Converts Dry Indoor Air into a Moist Heathful Atmosphere; for all kinds of Buildings; Can be placed behind any Radiator

Illustration broken away to show how Savo Air Moistener hangs on back of Radiator, out of sight.

No. 1
For Large High Radiator

No. 2
For High Radiator



No. 3
For Low Radiator

No. 4
For 3 Sec. Radiator

All Styles are finished in Aluminum only; They will fit on the back of any Radiator, where the space is 1¼ in. or more between Wall and Radiator; the No. 1 will take care of 3000 cubic feet of space; Other sizes 2000 or less

		Each
No. 1—	12½ in. Wide, 14 in. Deep, 3 in. Thick, For Large High Radiators; Weight 3 Lbs.	$2 50
No. 2—	8 in. Wide, 14 in. Deep, 2 in. Thick, For High Radiators; Weight 2½ Lbs	2 25
No. 3—	12½ in. Wide, 9 in. Deep, 2 in. Thick, For Low Radiators; Weight 3 Lbs	2 25
No. 4—	8 in. Wide, 7 in. Deep, 2 in. Thick, For High or Low Radiators; Weight 1¾ Lbs	1 50

GRABLER PIPE HANGERS

By Actual Test these Hangers have been found to be 14 times stronger than Jack Chain; 5 times stronger than Welded Chain, and 7 times stronger than Cast Iron Hangers.

A Hammer, Cold Chisel and Wrench are the only tools needed to put up and adjust these hangers

Used for Quick Work; Mostly used for Steam and Hot Water Heating Pipes, but also a good hanger for Soil Pipe; Bar is made of Soft Steel and can be bent to any desired angle; Holes for Bolts ½ in. apart; Usually fastened to Joists with Nails

No. A2012—HINGED RINGS | **No. B2012—STEEL BAND RINGS**

Price Includes Rings and Bolts Only; See below for Extension Bars

Size Pipe, Inches	½	¾	1	1¼	1½	2	2½
Weight Each, Oz.	2	2¾	3	3½	6	6½	7
Each	$0.17	.17	.19	.21	.23	.25	.27
Size Pipe, Inches	3	3½	4	4½	5	6	
Weight Each, Oz.	8	11¼	12¾	14	16¾	17½	
Each	$0.29	33	35	.37	.39	43	

Size Pipe, Inches	½	¾	1	1¼	1½	2	2½
Weight Each, Oz.	2	2¼	2½	3¼	6	6½	7
Each	$0.14	.14	.16	.18	.20	.22	.24
Size Pipe, Inches	3	3½	4	4½	5	6	
Weight Each, Oz.	8	11	12½	14	16	17	
Each	$0 26	.30	.32	.34	.36	.40	

For Expansion Ring Pipe Hangers, see Page 2122

EXTENSION BARS

No. C2012—GRABLER EXTENSION BARS

Used with Grabler Hangers shown above; Made of Soft Steel and can be bent to any desired angle; Holes for bolts ½ in. apart; Can be cut with Cold Chisel to any desired length.

Usually fastened to Joists with Nails

Size No.	For Pipe, In.	Wt. per 10 ft. Lgths.	Per Ft.
1	½ to 1½ in. Inclusive	3 Lbs.	$0.08
2	2 to 3 in. Inclusive	3¾ Lbs.	.09
3	3½ to 6 in. Inclusive	4½ Lbs.	.10

Sold only in Ten Foot Lengths

BEAM CLAMPS

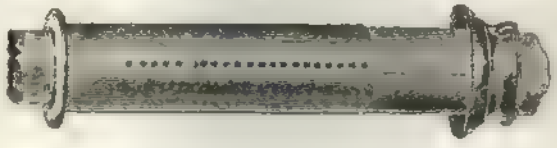
GRABLER ADJUSTABLE BEAM CLAMPS

Each

No. D2012—To be used in connection with Grabler Pipe Hangers, illustrated above, and the Extension Bars, shown on left, in which the holes are drilled for these Clamps; Adjustable for I Beams from 2 in. to 7 in. wide; Fitted with Brackets, with Lug and Bolts; Malleable Iron.....$0.50

Weight 1 Lb. Each

FLOOR SLEEVES



No. 2012—MARSWELLS ADJUSTABLE

Made of Galvanized Iron, in two pieces. Used to encase steam pipes to prevent them from coming in contact with wood or other material where Pipes pass through Floors or Partitions.

Made Adjustable in Length from 10 to 16 inches

Size of Pipe, In.	¾	1	1¼	1½	2	2½	3	3½	4	4½	5	6
Weight Each, Lbs.	¾	1	1¼	1½	1¾	2	2¼	2½	3	3¼	4	4½
Each	$0.30	.36	.40	.50	.60	.70	.80	.86	.94	1.10	1.20	1.30

All Above, Open Stock

CLUSTER BODIES

All National Electrical Code Standard, Fibre Lined, Multiple, Edison Base, Polished Brass Finish

TYPE 1

Diameter 4 in.

TYPE 1K

Diameter 4 in.

TYPE 2

Diameter 3 in.

These Wireless Clusters consist of two separably connected principal parts. The body portion carrying the threaded socket shells, connecting shell and bushings is held to the base by a snap lock, and may be attached or removed as a single unit without removing the bushings or disturbing the wiring connections. Type 1K has 3-wire connection for operating either center lamp only, side lamps only or all lamps in an undivided group. The usual 2-wire connection may be obtained by bridging the center contacts controlling the center lamp and the outer lamps.

Prices include flange tapped for ⅜ in. Iron Pipe

	Each
No. 12—Two Light	$1.60
No. 13—Three Light	1.85
No. 14—Four Light	2.10
No. 15—Five Light	2.85
No. 16—Six Light	3.60

Ten in Standard Package
Weight 12 Lbs. per Package

	Each
No. 13K—Three Light	$1 85
No. 14K—Four Light	2 10
No. 15K—Five Light	2 35
No. 16K—Six Light	2 60
No. 17K—Seven Light	2 85

Ten in Standard Package
Weight 12 Lbs. per Package

This Wireless Cluster consists of two one-piece contact plates, each of which is provided with a binding screw and serves the corresponding lamp terminals, an insulating porcelain base to which the plates are attached and a detachable shell of brass supported by especially designed porcelain rings or bushings.

Price includes flange tapped for ⅜ in iron pipe.

	Each
No. 22—Two Light	$1.35
No. 23—Three Light	1 80

Ten in Standard Package
Weight 7 Lbs. per Package

CLUSTER BODIES

TYPE 3

TYPE 3T

These Wireless Clusters have Socket Outlets at an angle especially adapting them for a close grouping of lamps. Type 3T is designed for metal filament lamps.

Diameter 3⅜ in.; Socket Angle 16°

	Each
No. 32—Two Light	$1.60
No. 33—Three Light	1.85

Ten in Standard Package
Weight 7 Lbs. per Package

Diameter 4½ in., Socket Angle 18°

	Each
No. 32T—Two Light	$1 75
No. 33T—Three Light	2 00
No. 34T—Four Light	2 25
No. 35T—Five Light	2 50

Ten in Standard Package
Weight about 14 Lbs. per Package

PLUG CLUSTERS

These Plug Clusters are designed for increasing the number of outlets of a single socket. No. 92½ may be used to advantage for operating 2-110 volt lamps in series on 220 volt circuit.

	Each
No. 92 —Two Light, Multiple	$1.00
No. 93 —Three Light, Multiple	1.30
No. 94 —Four Light, Multiple	1.60
No. 92½—Two Light, Series	1.00

Ten in Standard Package
Weight about 4 Lbs. per Package

WEATHER-PROOF CEILING FIXTURES

MULTIPLE

For Outside Lighting Purposes

TYPE 2 BODY

No. 4022—Two Light	$3.35
No. 4023—Three Light	3.50

Ten in Standard Package
Weight 21 Lbs. per Package

The Weather-Proof Cluster Fixtures consist of Aluminum Shell Cluster, Type 2 or 1, 15 in. enameled steel Reflector, and Flange tapped for ½ in. iron pipe; Socket Shells are of Copper; Flange is bolted to cluster back, and the reflector between is protected by two rubber gaskets.

Prices do not include Incandescent Lamps

TYPE 1 BODY

	Each
No. 4012—Two Light	$3 50
No. 4013—Three Light	3.75
No. 4014—Four Light	4.00
No. 4015—Five Light	4.25

Ten in a Standard Package
Weight 26 Lbs. per Package

WEATHER-PROOF FIXTURES

For Outside Lighting Purposes

All National Electrical Code Standard

PENDANTS

TYPE 2 BODY

	Each
No. 6022—Two Light, Multiple	$3.80
No. 6023—Three Light, Multiple	4.05

Ten in Standard Package
Weight 31 Lbs. per Package

These Weather-Proof Pendant Cluster Fixtures consist of Aluminum Shell Cluster, Type 2 or 1, 15 in. Enameled Steel Reflector, Flange, ½ in. Stem 8 in. Long and Separable Suspension fitting; Iron parts are galvanized; Socket Shells are of Copper; Flange is bolted to cluster back and the reflector between is protected by two rubber gaskets.

TYPE 1 BODY

	Each
No. 6012—Two Light, Multiple	$4 05
No. 6013—Three Light, Multiple	4.20
No. 6014—Four Light, Multiple	4 55
No. 6015—Five Light, Multiple	4 80
No. 6016—Six Light, Multiple	5 05

Ten in Standard Package
Weight 31 Lbs. per Package

GOOSENECKS

These Gooseneck Cluster Fixtures consist of Aluminum Shell Cluster, Type 2 or 1, 15 in. Enameled Steel Reflector, Flange, Gooseneck consisting of 36 in. of ⅛ in. Iron Pipe overhanging 30 in. and Wall Fitting. Iron parts are galvanized. Socket Shells are of Copper. Flange is bolted to cluster back, and the reflector is protected between by two rubber gaskets.

TYPE 2 BODY

	Each
No. 5022—Two Light, Multiple	$4.15
No. 5023—Three Light, Multiple	4.40

Ten in Standard Package; Weight 52 Lbs. per Package

TYPE 1 BODY

	Each
No. 5012—Two Light, Multiple	$4.40
No. 5013—Three Light, Multiple	4.65
No. 5014—Four Light, Multiple	4.90
No. 5015—Five Light, Multiple	5.15
No. 5016—Six Light Multiple	5.40

Ten in Standard Package; Weight 58 Lbs. per Package

MAZDA ARCS

For Interior Lighting Purposes

Fixtures T52—T55 have Cluster Body, Enameled Steel Reflector Plate, 15 in. Stem of ⅜ in. Iron Pipe and ¾ in. Brass Casing, 18 in. Opal Reflector, 5x4 in. Canopy and Crowfoot. Prices include Stem Wires, but no Incandescent Lamps.

Fixtures T83—T85 have Cluster Body, 15 in. Stem of ⅜ in. Iron Pipe and ⅞ in. Brass Casing; Reflector Holder, 18 in. Opal Reflector, Ventilated Enclosing Globe, 5½x4 in. Canopy and Crowfoot. Prices include Stem Wires, but no Incandescent Lamps and Switch.

Additional Length Stems on above can be furnished at 60c per foot.

Length 25 in. Over-all
Brushed Brass Finish

	Each
No. T52—Two Light, Multiple	$7.10
No. T53—Three Light, Multiple	7.40
No. T54—Four Light, Multiple	7.70
No. T55—Five Light, Multiple	8.00

Ten in Standard Package
Weight 70 Lbs. per Package

Length 10 in. Over-all
Brushed Brass Finish

This fixture is the same as Nos. T83 T85 except it has an Ornamental Base instead of Stem, Canopy and Crowfoot, but no enclosing Globe. An inner special Reflector Shell of Frosted Aluminum assists in the downward radiation of light.

	Each
No. T823—Three Light, Multiple	$6.90
No. T824—Four Light, Multiple	7.20
No. T825—Five Light, Multiple	7.50

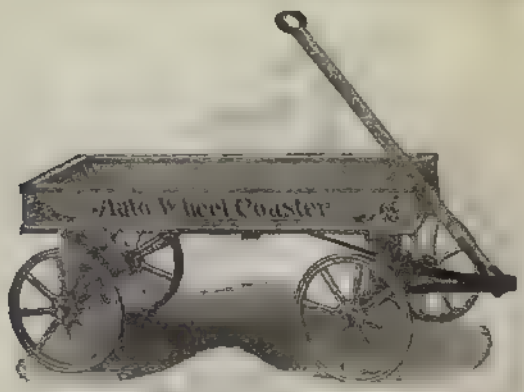
Ten in Standard Package
Weight 45 Lbs. per Package

Length 23 in. Over-all
Brushed Brass Finish

	Each
No. T83—Three Light, Multiple	$11.00
No. T84—Four Light, Multiple	11.30
No. T85—Five Light, Multiple	11.60

Ten in Standard Package
Weight 85 Lbs. per Package

COASTER WAGONS



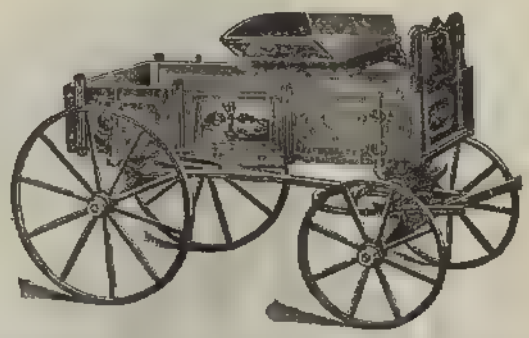
AUTO WHEEL COASTERS

The Wheels are of the Standard Automobile Type and have Roller Bearings; the Hubs and Bushings are Cold Rolled Pressed Steel; Seasoned White Ash Spokes, riveted in Hub; ½x¾ in. Felloe; ⅛x¾ in. Flat Steel Tire, electrically welded and shrunk on by hydraulic pressure; Steel Axles, Hubs and Bearings protected by Dust Caps; Bed is made of well seasoned, Second Growth White Ash; the Whole Body is strongly braced and can be easily removed; Handsomely Finished in attractive Colors.

	Per Dozen
No. 1—Size 14x32 in.; 8 in. Wheels; Weight 25 Lbs. Each	$69.00
No. 2—Size 14x34 in.; 10 in. Wheels; Weight 30 Lbs. Each	75.00
No. 3—Size 16x38 in.; 10 in. Wheels; Weight 35 Lbs. Each	84.00
No. 4—Size 18x40 in., 12 in. Wheels; Weight 40 Lbs. Each	96.00

Each Coaster in a Sealed Corrugated Pasteboard Container, except No. 1, which is Two in a Carton

BOY'S FARM WAGONS



Made similar to a Farm Wagon; Sides and Ends can be taken off, leaving Bed with Stakes; Hardwood Frame, Seat and Dashboard; Handsomely Painted and Ornamented with Scroll Work; Bent Hounds, Adjustable Reach; Wheels have Steel Hub Caps and Bands; Heavy Welded Tires and Shaved Spokes; All parts Strongly Ironed and Braced; Round Steel Axles.

	Each
No. 601—Body 18x36 in., Depth of Wagon Box 5½ in., Wheels 14 in. Front, 20 in. Rear, Axles ⅞ in. Diam.; Complete with Tongue	$16.00

One in a Crate; Weight 60 Lbs.

	Per Pair
No. 612—Shafts Only, for No 601 Boys' Farm Wagons; Hardwood, Painted Red; for Dog or Goat	$1.25

One Pair in a Crate; Weight 7 Lbs. per Pair

KIDDIE-KARS

This is a Car for both young and older children for riding on the sidewalk, porch or on the floor; It gives the child exercise and healthy recreation and satisfies the desire for something to ride and steer; There is plenty of action and fun and harmless amusement and it can be used anywhere and at any time; It is safe for even the tiniest tot, there are no sharp corners and it is so low the child is nearer the floor than when standing; Let the youngster try it once—you'll buy it.

Wheels are made of Hard Maple, Painted Red; Top is made of Basswood and the balance of the Car is made of Birch, all nicely Varnished and Finished.

	Per Dozen
No. 1—For Children, One to Two Years Old; Length 16 in., Height to Top of Seat 7 in.; Weight 3¾ Lbs. Each	$15.00
No. 2—For Children, Two to Three Years Old; Length 17 in., Height to Top of Seat 8½ in.; Weight 4½ Lbs. Each	21.00
No. 3—For Children, Three to Four Years Old; Length 18 in., Height to Top of Seat 10 in.; Weight 5¼ Lbs. Each	27.00
No. 4—For Children Four Years and Older; Length 20 in., Height to Top of Seat 11½ in.; Weight 6¼ Lbs. Each	33.00

One in a Package

CHILDREN'S SCOOTERS

The Small Child's Bicycle

NIAGARA; BALL BEARING

The Child's Delight; Safe as Roller Skating; Invigorating; Hygenic; Gives just the required amount of exercise without overdoing.

Puts more Life into a Healthy Boy or Girl and gives health and strength to those not possessing their full share of these blessings.

Designed especially for children too young to ride a Bicycle, but who enjoy healthy, invigorating outdoor exercise as well as their larger brothers and sisters; This is a very simple, yet extremely popular article for boys and girls of all ages; There is no danger to the child riding it, or to pedestrians on the sidewalk.

	Per Dozen
No. 1—Metal Parts made of Crucible Steel, Maroon Finish; Wood Parts are made of Ash, Natural Finish; Wheels are 4½ in. Diam.; Black Finish, Length Over-all 32 in., Width of Foot Board 4½ in.	$30.00

Half Dozen in a Crate
Weight 8½ Lbs. Each

VELOCIPEDES

Black Enameled Iron Frame, Tinned Steel Wheels, Black Enameled, Hardwood Handle Grips with Brass Ferrules to prevent Splitting, Oak Tanned Leather Saddle, Square Adjustable Saddle Post; Narrow Tread.

With Oval Steel Tires

Nos.	1	2	3
Front Wheel, In.	16	20	24
Rear Wheels, In.	12	14	16
For Boys and Girls, Years	4 to 6	6 to 8	8 to 10
Height, In.	27	32	36
Weight Dozen, Lbs.	165	190	240
Each	$3 60	4.30	5.10

With Rubber Tires

Same Dimension as Above

Nos.	1R	2R	3R
Weight Dozen, Lbs.	165	190	240
Each	$6 00	6 50	7.20

With Oval Steel Tires

Wheels, Crank and Pedals Enameled Red; Adjustable Fiber Saddle; Otherwise same as Nos. 1, 2 and 3

Nos.	1E	2E	3E
Each	$3.50	4.10	4.70

One in a Bundle, Knocked Down

FOR BOYS AND GIRLS, 4 TO 6 YEARS OLD

Each

No. 21—Diam. Front Wheel 16 in., Rear Wheels 12 in.; ⅝ in. Rubber Tires; Heavy Wrought Iron Frame; Red Enamel Finish, Striped in Gold; Juvenile Adjustable Bicycle Saddle with Double Coil Spring; Nickel Plated, Adjustable Handle Bars; Leather Wound Handle Grips; Removable Pedals and Cranks; Weight 26 Lbs. Each..... $9.25

FOR BOYS AND GIRLS, 6 TO 8 YEARS OLD

Each

No. 22—Diam. Front Wheel 20 in., Rear Wheels 14 in.; Otherwise same as above; Weight 33 Lbs. Each..... $10 00

One in a Crate

BALL BEARING

Frame of Heavy Wrought Iron, Finished Red Enamel, Striped in Gold; Wheels, Bright, Tin Plated, with ⅝ in. Rubber Tires, Front and Rear; Forged Steel Nickel Plated Ball-Bearing Bicycle Pedals; Adjustable Leather Bicycle Saddle, with Double Nickel Plated Springs; Adjustable Handle Bars, with Leather Wound Grips.

Each

No. 31—For Boys and Girls, 4 to 6 Years; Wheels, 16 and 12 in.; Weight 29 Lbs. Each..... $15.25

No. 32—For Boys and Girls, 6 to 8 Years; Wheels, 20 and 14 in.; Weight 35 Lbs. Each..... 16.00

No. 33—For Boys and Girls, 8 to 10 Years; Wheels, 24 and 16 in.; Weight 40 Lbs. Each..... 16.75

One in a Crate

FOR BOYS AND GIRLS, 6 TO 8 YEARS OLD

No. 12—Diam. Front Wheel 20 in., Rear Wheels 14 in.; ⅝ in. Rubber Tires; Heavy Wrought Iron Frame; Black Enameled; Adjustable Sole Leather Saddle; Tinned Spokes; Extra Long Rear Axle; Adjustable Handle Post..... $7.30

One in a Crate; Weight 32 Lbs. Each

COMPONENT PARTS OF SHOT GUNS

FOR NORWICH FIRE ARMS CO. SHOT GUNS

In Ordering, Give Name of Gun and Name and Number of Part

HAMMER GUN PARTS

Nos.	Each
1—Firing Pin	$0 15
2—Firing Pin Bushing	40
3—Butt Plate	80
4—Bridle	40
5—D. & E. Large Part	60
6—D & E Small Part	40
7—D & E Spring	30
8—Extractor	80
9—Fore-end Iron	2 00
10—Guard	80
11—Hammer	80
12—Locking Bolt	40
13—Lever	80
14—Lever Arm	20
15—Lever Spring	20
16—Main Spring (Spiral)	40
17—Main Spring Rod	20
18—Sear	30
19—Sear Spring	20
20—Trigger Plate	1 00
21—Tumbler	60
22 Trigger	30
54—Butt Plate Screws	50
55—Bridle Screw	15
56 D & E Screw	15
57—Extractor Screw	15
58—Fore-end Screw	.15
59—Hammer Screw	.15
60—Lever Screw	.15
61—Rosette Screw	15
62—Sear Spring Screw	15
63—Side Plate Screw	15
64—Trigger Plate Screw	15
65—Tang Screw	15
66—Roll	30
67—Extractor Pin	15
D. & E. Catch, complete	1 00
Fore-end, complete	3 00
Fore-end, Wood only	1 50
Flat Main Spring	60
Finished Stock	7 00
Barrel Loop	1 20
Lock, complete	2 00
Sight	15

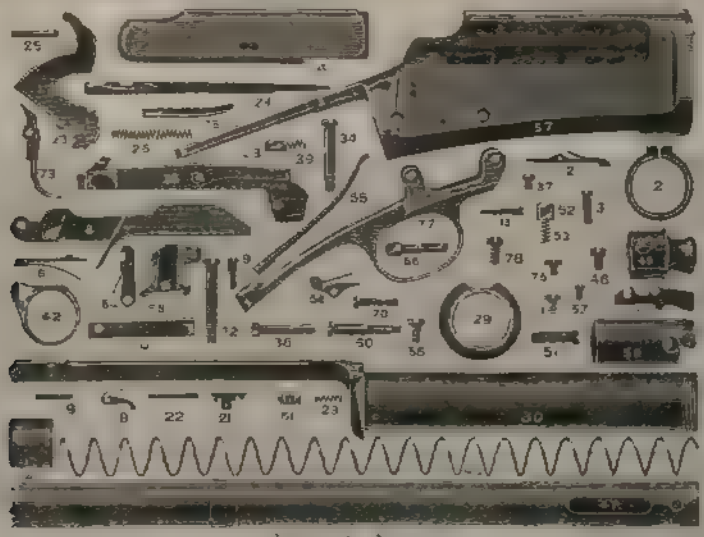
HAMMERLESS GUN PARTS

Nos.	Each
23—Bridle	$0.30
24—Cocking Rod	.40
25 Firing Pin	.40
26—Firing Pin Bushing	40
27—Fore-end Iron	2.00
28—Hammer	80
29—Indicator	.30
30—Indicator Spring	20
31 Locking Bolt	40
32—Lever	80
33—Lever Stud	20
34—Lever Arm	20
35—Main Spring	.40
36—Main Sprng Rod	20
37 Sear	.30
38 Sear Spring	20
39 Safety Rod	20
40—Safety Slide	40
41 Safety Slide Spring	20
42 Trigger	30
43 Trigger Spring	20
44—Trigger Plate	1 00
45—Cocking Lever Screw	15
46—Cocking Pin	15
47—Guard Screw	15
48—Indicator Spring Screw	15
49 Lock Screw	15
50—Safety Slide Spring Screw	15
51—Side Plate Screw	15
52—Front Tang Screw	15
53—Trigger Spring Screw	15
54—Butt Plate Screws	50
56—D & E Screws	15
67—Extractor Pin	.15
Finished Stock	7 00

COMPONENT PARTS OF MARLIN REPEATING SHOT GUNS

FOR MODELS 24 AND 30

In Ordering, Give Model, Gauge and Number of Gun and Name and Number of Part



Nos		Each
1	Barrel, Grade "A"	$11 00
	Barrel, Grade "B" and "C", matted	22 50
2	Barrel Lock Nut	60
3	Barrel Lock Nut Screw	10
4	Breech Bolt	3 50
5	Buttstock, Grade "A"	3 00
	Buttstock, Grade "B"	4 25
	Buttstock, Grade "C"	7 50
	Buttstock, Grade "D"	16 00
6	Buttplate	85
7	Buttplate Screws (2), each	10
8	Carrier	2 25
9	Carrier Screw	15
10	Carrier Cartridge Stop	45
11	Carrier Cartridge Stop Screw	10
12	Cartridge Stop in Frame	40
13	Cartridge Stop in Frame Screw	15
14	Cartridge Stop in Frame Spring	15
15	Cartridge Stop in Frame Spring Rivet	10
16	Ejector Complete	40
17	Ejector Spring	10
18	Extractor (right side) with Spring	40
19	Extractor (right side) Pin	10
20	Extractor (right side) Spring	10
21	Extractor (left side)	40
22	Extractor (left side) Pin	10
23	Extractor (left side) Spring	10
24	Firing Pin	50
25	Firing Pin Pin	10
26	Firing Pin Spring	15
27	Fore-end, Grade "A"	1 15
	Fore-end, Grade "B"	2 50
	Fore-end, Grade "C"	4 00
	Fore-end, Grade "D"	5 00
28	Fore-end Retaining Pins (2), each	10
29	Fore-end Cap Nut	50
30	Fore-end Slide and Tube	3 00
31	Fore-end Slide Spring	10
32	Fore-end Slide Spring Rivet	10
33	Hammer (with roller and pin)	80
34	Hammer Screw	15
35	Locking Bolt	2 00
36	Locking Bolt Pin	15

Nos		Each
37	Locking Bolt Pin Screw	$0 10
38	Locking Bolt Catch	20
39	Locking Bolt Catch Spring	15
40	Locking Bolt Catch Pin	.10
41	Magazine Tube	1.75
42	Magazine Tube Band (with fore-end Slide Spring and Rivet)	1 00
43	Magazine Tube Spring	.40
44	Magazine Tube Spring Follower	.50
45	Magazine Tube Plug (outside)	75
46	Magazine Tube Plug Screws (2), each	10
47	Magazine Tube Plug Latch	75
48	Magazine Tube Plug Latch Spring	10
49	Magazine Tube Plug Latch Pin	10
50	Magazine Tube Plug (inside)	60
51	Magazine Tube Stud Screw	15
	Magazine Tube Stud Set Screw	10
52	Magazine Tube Catch	20
53	Magazine Tube Catch Spring	15
54	Magazine Tube Catch Pin	10
55	Mainspring	40
56	Mainspring Screw	10
57	Receiver	9 50
58	Recoil Safety Block with Spring	90
59	Recoil Safety Block Spring	15
60	Recoil Safety Block Screw	15
61	Recoil Safety Block Plunger	25
62	Recoil Safety Block Plunger Spring	15
63	Recoil Safety Block Plunger Pin	10
64	Recoil Safety Hook with Spring	30
65	Recoil Safety Hook Spring	15
66	Recoil Safety Push Pin	20
67	Recoil Safety Push Pin Screw	10
68	Sear with Sear Spring	50
69	Sear Spring	10
70	Sear Screw	15
71	Sight	20
72	Tang Screw	15
73	Trigger	50
74	Trigger Pin	.10
75	Trigger Spring	15
76	Trigger Spring Screw	15
77	Trigger Plate or Guard	2 25
78	Trigger Plate Screws (2), each	15

COMPONENT PARTS FOR MARLIN TRAP GUNS

Prices same as for Models 24 and 30 Parts, except

	Each		Each
Barrel, Special Rolled Steel, Matted	$16 00	Buttplate	$1 00
Breech Bolt	4 00	Carrier	2 50
Buttstock, straight grip	12.00	Fore-end	4 00

COMPONENT PARTS FOR MARLIN FIELD GUNS

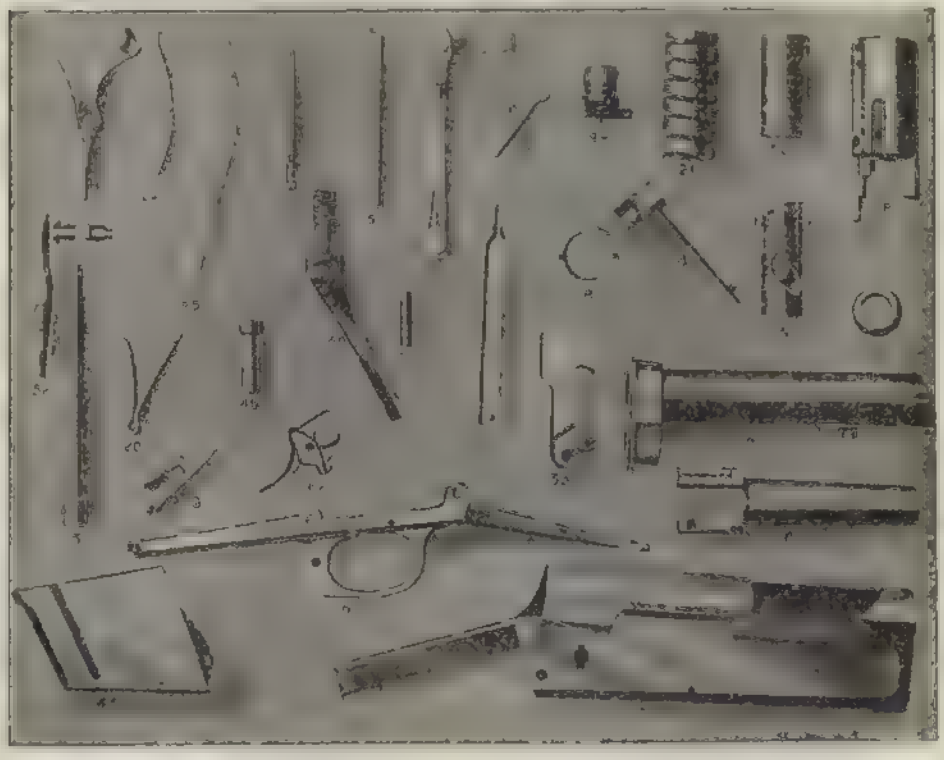
Prices same as for Models 24 and 30 Parts, except

	Each		Each
Barrel, Special Rolled Steel	$11 00	Fore-end	$4 00
Buttstock, straight grip	12 00		

Note—Pistol-Grip Stocks, trigger Plates, etc., will not interchange with corresponding parts of straight-grip guns

COMPONENT PARTS OF Remington-UMC AUTO-LOADING RIFLES

In Ordering, Give Caliber, Grade and Number of Rifle and Name and Number of Part



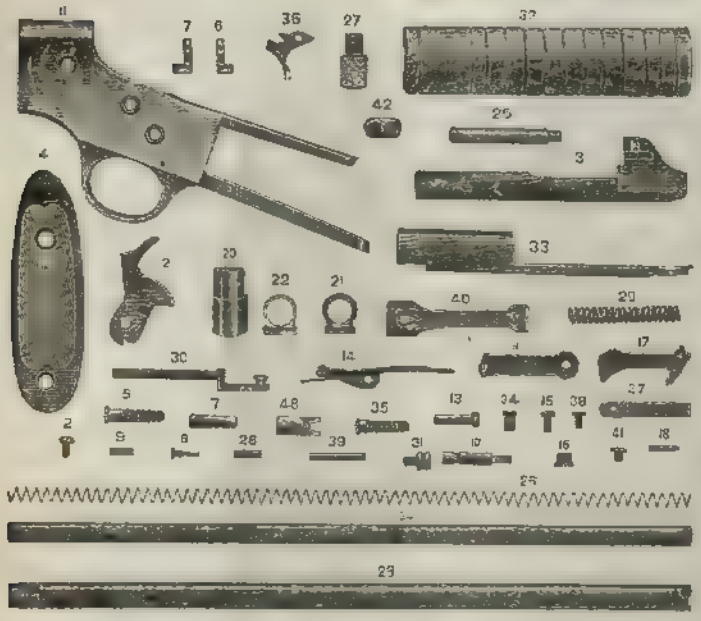
Nos.		Each
1—Action-Spring		$ 0.40
2—Action-Spring Follower		.85
3—Action-Spring Plug with Pin		20
4—Action-Spring Tube		.50
5—Barrel		8.00
6—Barrel Extension		3 00
7—Barrel Jacket		5 00
8—Barrel Jacket Bushing		30
9—Barrel Nut		.50
10—Barrel Lock		.75
11—Barrel Lock Screw		.10
12—Barrel Lock Spring		.10
13—Bolt		3.00
14—Bolt Cam Pins, each		.20
15—Bolt Lock		30
16—Bolt Lock Spring		.25
17—Bolt Lock Pin		.10
18—Bolt Carrier		5 00
19—Bolt-Carrier Latch		30
20—Bolt-Carrier Latch Spring		15
21—Buffer Spring		50
22—Butt Stock	No. 1	3 50
	No. 3	12 00
	No. 4	15 00
	No. 5	20 00
	No. 6	25 00
23—Butt Plate		.85

Nos.		Each
24—Butt Plate Screws, each		$0.10
25—Carrier Latch Screw		.10
26—Ejector		.20
27—Ejector Pin		.10
28—Ejector Spring		.10
29—Escutcheon		.20
30—Extractor		75
31—Firing Pin		.50
32—Firing pin Pin		.10
33—Forearm	No. 1	2.00
	No. 3	6.00
	No. 4	8 00
	No. 5	10.00
	No. 6	12.00
34—Forearm Screw and Swivel		.25
35—Hammer		75
36—Hammer Roll		.15
37—Hammer Roll Pin		.10
38—Hammer Pin		10
39—Hammer Bushing		25
40—Jacket Head		2 50
41—Link		1.00
42—Link Pin		.10
43—Magazine		3 00
44—Magazine Indicator, thumb-piece and spring		1.00
45—Magazine Spring		.50

Nos.		Each
46—Magazine Follower		$0 25
47—Main-Spring		.40
48—Main-Spring Screw		.10
49—Operating Handle		.50
50—Operating Handle Bushing		.25
51—Operating Handle Plunger		20
52—Operating Handle Plunger Spring		.10
53—Peep Sight Base Screw		.10
54—Receiver	Grade 1 and 3	10.00
	Grade 4	20.00
	Grade 5	30 00
	Grade 6	60.00
55—Recoil Spring		.25
56—Recoil Spring Case		40
57—Safety		50
58—Safety Rocker		.75
59—Safety Rocker Stop Screw		10
60—Take-down Screw, Lever and Pin		.25
61—Tang Screw		10
62—Trigger		50
63—Trigger Spring		.20
64—Trigger Pin		.10
65—Trigger Plate		2 50
66—Trigger Plate Pin		.10
67—Trigger Plate Screw		.10
68—Rear Sight		1 00
69—Front Sight		.30
70—Front Sight Base		.25

COMPONENT PARTS OF STEVENS REPEATING RIFLES

FOR VISIBLE LOADING, NOS. 70, 70½ 71, 71½, 72 AND 72½



In Ordering give Caliber and Number of Rifle, also Name and Number of Part

Nos.	Each
1—Action Pin	$0 15
2—Action Pin Screw	05
Barrel without sights	1 75
Barrel with sights	2 50
3—Breech Block	1 50
4—Butt Plate	50
5—Butt Plate Screw (3)	05
6—Extractor Rivet	25
7—Extractor Lift	25
8—Extractor Screw (2)	05
9—Extractor Spring	05
Extractor Spring Pin (2)	05
10—Firing Pin	20
11—Frame	1 50
12—Hammer	75
13—Hammer Screw Nut (2)	10
14—Hammer Lock	50
Hammer Lock Spring	50
15—Hammer Lock Screw (2	05
16—Hammer Lock Dummy Screw	05
17—Lifter	20
18—Lifter Pin	05
19—Locking Cam	50
20—Locking Cam Sleeve	50
21—Magazine Mount Front	30
22—Magazine Mount Rear	30
23—Magazine Tube Outside	85
24—Magazine Tube Inside	85
25—Magazine Follower	.10
26—Magazine Spring (Complete $1 25)	20
27—Magazine Plug	10
28—Magazine Plug Pin	.05

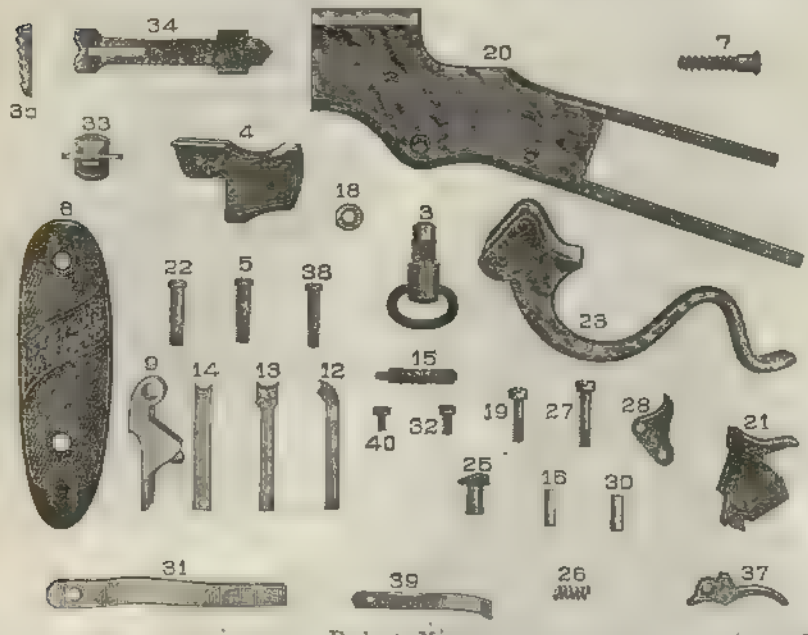
Nos.	Each
29—Main Spring	$0 10
—Main Spring Plunger Bracket	
30—Main Spring Plunger Wire	25
—Main Spring Plunger Stud	
31—Main Spring Screw	05
—Stock	1.00
32—Slide Handle	50

Nos.	Each
Slide Handle Sleeve	
33—Slide Handle Bar	$2 00
Slide Handle Bar Rivets (2)	
34—Slide Handle Screw (2)	05
35—Lug Screw	05
36—Trigger	35
37—Trigger Spring	05
38—Trigger Spring Screw	05

Nos.	Each
39—Trigger Pin	$ 05
40—Sporting Rear Sight	50
41—Sporting Rear Sight Screw	05
42—Front Sight	25
43—Main Spring Plunger Seat	10
44—Dummy Screw (2)	05
45—Slide Handle Escutcheon (2)	05
46—Sporting Rear Sight Adj. Screw	05

COMPONENT PARTS OF STEVENS SINGLE SHOT RIFLES

FOR FAVORITE RIFLES, NOS. 17, 18, 19, 20 AND 21



In Ordering give Caliber and Number of the Rifle, also Name and Number of Part

Nos.	Each
1—Barrel with Sights, No. 17	$4 00
2—Barrel without sights	3 00
3—Barrel Screw	.25
4—Breech Block	.50
5—Breech Block Screw	.10
6—Butt Plate, Rubber, Nos. 17, 18, 19 and 20	.50
—Butt Plate, No. 2 Swiss for No. 21	2.75
7—Butt Plate Screw	05
8—Dummy Screw	.05
9—Ejector, .22 Cal.	50
10—Ejector Spring	05
11—Ejector Spring Plunger	.15
12—Extractor No. 1	25
13—Extractor No. 2	25
14—Extractor No. 3	25
15—Firing Pin	30
16—Firing Pin Pin	.05
17—Fore-end complete, Nos 17, 18, 19 and 20	40
Fore-end complete, No. 21	3 50
18—Fore-end Escutcheon	.05
19—Fore-end Screw	.05
20—Frame	1.50

Nos.	Each
21—Hammer	$0 60
22—Hammer Screw	05
23—Lever (Ejector, 22 Cal.)	50
24—Lever (Extractor, .25-32 Cal.)	.75
25—Lever Plunger, 25-32 Cal.	15
26—Lever Plunger Spring .25-32 Cal.	.05
27—Lever Screw	.10

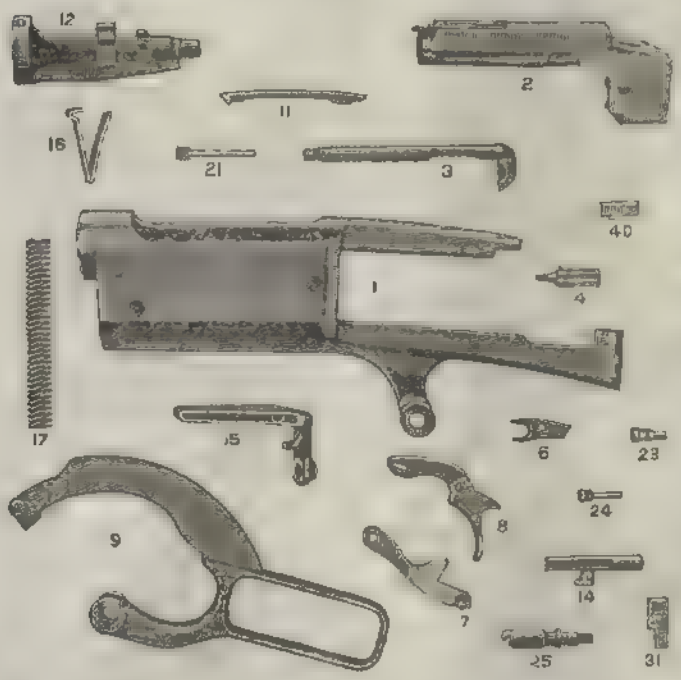
Nos.	Each
28—Link (Ejector, .22 Cal.)	$0 20
29—Link (Extractor, .25-32 Cal.)	20
30—Link Pin	05
31—Mainspring	.15
32—Mainspring Screw	.05
33—Front Sight, Rocky Mountain	50
34—Rear Sight, Sporting, complete	.75
35—Rear Sight Step	.20

Nos.	Each
36—Stock without Butt Plate, Nos. 17, 18, 19 and 20	$1 20
Stock without Butt Plate, No. 21	12 00
37—Trigger	.35
38—Trigger Screw	.05
39—Trigger Spring	15
40—Trigger Spring Screw	.05

COMPONENT PARTS OF SAVAGE REPEATING RIFLES

FOR MODEL 1899, SOLID FRAME, TAKE-DOWN, FEATHERWEIGHT CARBINE OR SADDLE GUN

In Ordering, Give the Name and Number of the Part, also Model, Caliber and Number of the Rifle

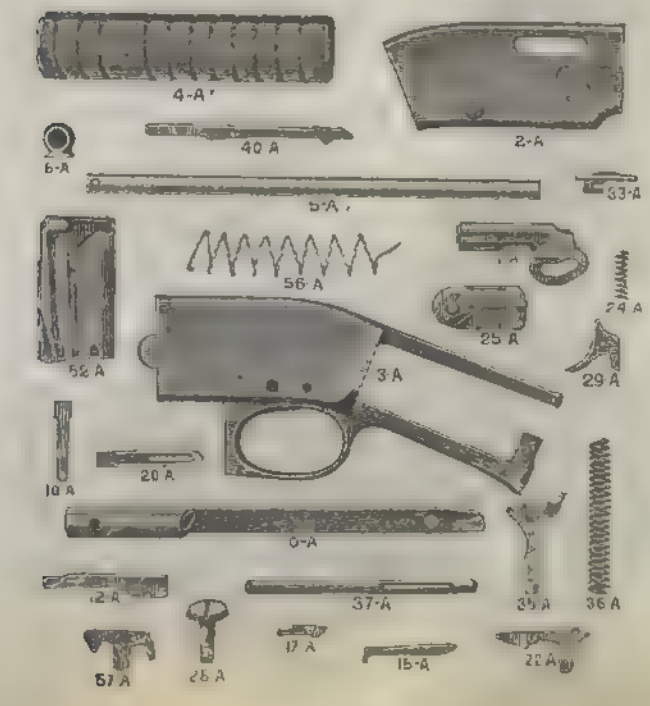


Nos.	Each
15—Automatic Cut-off	$2 00
16—Automatic Cut-off Spring	.25
32B—Barrel, Half Octagon	10.50
32A—Barrel, Octagon	10 50
32—Barrel, Round	9 00
20—Barrel Stud	.25
31—Bolt Stop	.10
30—Bolt Stop Screw	.05
2—Breech Bolt	3 00
2A—Breech Bolt, Complete	5.00
35—Butt Plate, Rifle	80
36—Butt Plate Screws	.05
35B—Butt Plate Shot Gun, Rubber	50
35A—Butt Plate Shot Gun Steel	30
33—Butt Stock	2 00
34—Butt Stock Screw	25
43—Ctg. Stop (small projecting part on top of Breech Bolt)	.25
11—Extractor	.30
28—Extractor Pin	05
9—Finger Lever	1 75
10—Finger Lever Bushing	25
22—Finger Lever Bushing Screw	.15
4—Firing Pin	40
29—Firing Pin, Securing Pin	05
37—Forearm	1 00
37A—Forearm, Take Down	5.00
37B—Forearm, Wood only, T D	1 50

Nos.	Each
38—Forearm Screw	$0 05
Front Sight, Regular	25
Front Sight, Featherweight	.50
Rear Sight, Regular	75
39—Forearm Washer	10
3—Hammer	60
5—Hammer Bushing	15
24—Hammer Bushing Screw	10
40—Hammer Indicator	40
42—Hammer Indicator Pin	05
41—Hammer Indicator Washer	.10
6—Hammer Retractor	30
23—Hammer Retractor Screw	.10
6A—Hammer Retractor Spring	15
12—Magazine Carrier	1 00
12A—Magazine Carrier, Complete	1 80
13—Magazine Spindle	30
13A—Magazine Spindle Head	30
13B—Magazine Spindle Nut	15
21—Magazine Spindle Screw	.15
19—Magazine Spring	30
17—Mainspring	30
1—Receiver	7 00
7—Sear	.40
25—Sear Screw	30
8—Trigger	40
14—Trigger Lever Lock	50
27—Trigger Pin	05
18—Trigger Spring	20
26—Trigger Spring Screw	05

FOR MODELS 1903 AND 1909

Except where parts are specified separately for Models 1903 and 1909 Rifles, prices on each remain the same. In ordering, give the Name and Number of the part, also Model and Number of Rifle.

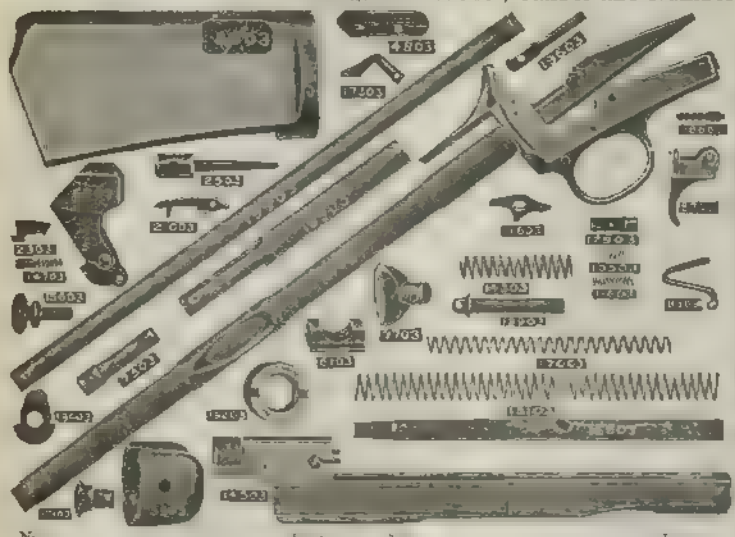


Nos.	Each
10A—Action Slide	$0.90
40A—Action Slide Lock	15
42A—Action Slide Lock Pin	03
41A—Action Slide Lock Spring	15
28A—Assembling Screw	20
1A—Barrel, Octagon, Model 1903	6 00
61A—Barrel, Octagon, Round Model 1909	5 00
2A—Barrel Receiver	4 00
6A—Barrel Stud	25
7A—Barrel Stud Screw	05
11A—Breech Bolt	1 00
46A—Butt Plate Screws	05
45A—Butt Plate Steel, Rifle	40
45A—Butt Plate Steel, Shot Gun	40
43A—Butt Stock, Model 1903	1 50
Butt Stock, Model 1909	1 00
44A—Butt Stock Screw	10
17A—Ejector	20
21A—Ejector Plate Screw	05
19A—Ejector Pin	05
20A—Ejector Plate	10
18A—Ejector Spring	15
15A—Extractor	25
16A—Extractor Pin	03
25A—Hammer	60
26A—Hammer Pin	05
27A—Hammer Screw	10
47A—Long Distance Screw	05
58A—Magazine Body	15
57A—Magazine Carrier	10
Front Sight, Model 1909	25

Nos.	Each
Rear Sight, Model 1909	$0.25
Front Sight, Model 1903	25
Rear Sight, Model 1903	50
22A—Magazine Catch	.15
23A—Magazine Catch Pin	.03
24A—Magazine Catch Spring	.10
52A—Magazine Complete	.25
56A—Magazine Spring	.10
36A—Mainspring	.30
39A—Mainspring Pin	.03
37A—Mainspring Rod	.20
38A—Mainspring Washer	.10
59A—Rear Sight Screw	.05
60A—Rubber Butt Plate	.50
48A—Safety Bar	.15
33A—Safety Lever	.25
34A—Safety Lever Pin	.03
49A—Safety Lever Screw	.05
4A—Side Handle, Model 1903	.40
4A—Side Handle, Model 1909	.25
8A—Side Handle Escutcheon	.05
5A—Side Handle Rod	.20
9A—Side Handle Screw	.05
3A—Solid Receiver	5.00
12A—Striker	.40
13A—Striker Pin	.03
14A—Striker Stop Pin	.03
29A—Trigger	.40
30A—Trigger Pin	.05
31A—Trigger Spring	.15
32A—Trigger Spring Screw	.05

COMPONENT PARTS, WINCHESTER AUTOMATIC RIFLES

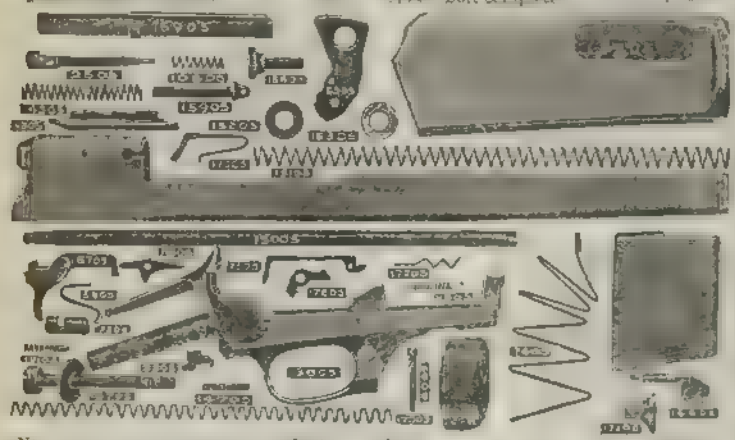
In Ordering, Give Model, Caliber and Number of Rifle and Name and Number of Part



FOR MODEL 1903, AUTOMATIC

Nos.	Each
[illegible] Bolt Spring	$0 10
15003—Bolt Guide Rod	.25
[illegible]	[illegible]
[illegible]	[illegible]
[illegible] each	[illegible]
[illegible] Butt Stock complete	[illegible]
[illegible] Stock Nut Washer	
20703—Cartridge Cut-off.	.25
20803—Cartridge Cut-off Spring	
[illegible] Cartridge Cut-off complete	[illegible]
20903—Cartridge Cut-off Pin	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	.05
[illegible]	.20
6303—Hammer	2 60
15903—Hammer Spring Guide Rod	
16003—Hammer Spring Guide Rod Pin	.05
[illegible]	[illegible]
[illegible] Hammer Spring	[illegible]
19403—Hammer Spring Abutment	.30
19503—Hammer Spring Abutment Pin	.05
[illegible]	[illegible]
[illegible] Magazine Tube, Outer Throat and Tang	[illegible]
19003—Magazine Tube, Inner	.15
[illegible] Magazine Plug	.15
[illegible] Magazine Follower	[illegible]
[illegible] Magazine Spring	[illegible]
[illegible] Magazine Follower	.07
20003—Magazine Tube, Inner, complete	.35

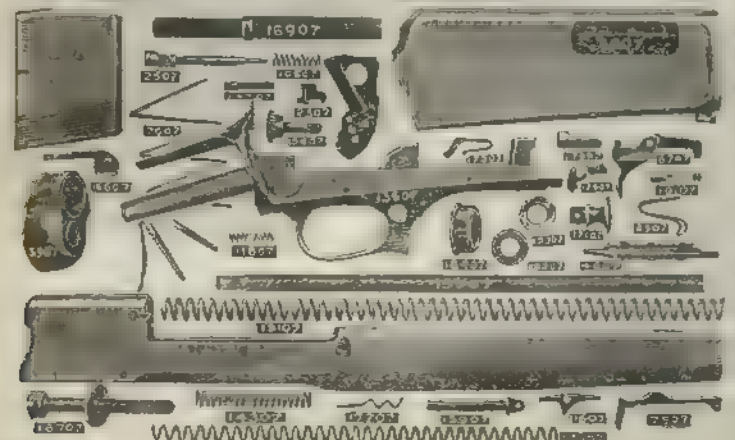
Nos.	Each
19603—Magazine Friction Spring	.$0 10
20803—Magazine Charger complete	.50
16903—Operating Sleeve	.70
17003—Operating Sleeve Tip	.15
17203—Operating Sleeve Tip Pin	.05
17003—Operating Sleeve Spring	.05
10903—Rear Sight	.55
20303—Rear Sight Adjusting Screw	.05
20203—Rear Sight complete	.60
6203—Receiver	7 00
[illegible]	.70
21403—Ejector Screw	.15
13703—Take Down Screw Bushing	.20
8103—Receiver complete	7 15
11003—Sear	.4
[illegible]	.05
[illegible] Screw	.15
[illegible] Stop Pin	.15
[illegible] Take Down Screw complete	.20
[illegible] Take Down Screw	.60
17403—Take Down Screw Lock Pin	.05
17503—Take Down Screw Lock Spring	.05
[illegible]	.05
8703—Trigger	.50
8803—Trigger Pin	.05
8903—Trigger Spring	.10
[illegible]	.20
19603—Trigger Lock Plunger and Spring	.10
18103—Trigger Lock Plunger Spring	.05
21503—Write for Special	.15



FOR 32 CAL., MODEL 1905, SELF-LOADING
FOR 35 CAL., MODEL 1905, SELF-LOADING

Nos.	Each
3105—Butt Plate	$0 50
3205—Butt Plate Screws (2) each	.05
2905—Butt Stock complete	2 40
15405—Butt Stock Bolt	[illegible]
15505—Butt Stock Bolt Washer	[illegible]
18705—Butt Stock Bolt complete	.15
8505—Forearm	1 00
[illegible]	[illegible]
[illegible] Screw	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible] Spring	[illegible]
15905—Hammer Spring Guide Rod	.20
16005—Hammer Spring Guide Rod Pin	.05
16105—Magazine	.85
7605—Magazine Spring	.25
[illegible] Magazine Follower	.40
[illegible] Magazine Follower Roll	.05
[illegible] Magazine Follower Roll Pin	.05
18905—Magazine, 32 Caliber, complete	1 50
16805—Magazine	.85
7605—Magazine Spring	.20
7505—Magazine Follower	.40
16205—Magazine Follower Roll	.05
16305—Magazine Follower Roll Pin	.05
18905—Magazine, .35 Caliber complete	1 50
16805—Magazine Lock	.15
16705—Magazine Lock Screw	.05

Nos.	Each
16805—Magazine Lock Spring	$0 05
16905—Operating Sleeve	.75
[illegible] Operating Sleeve Spring	.10
17105—Operating Sleeve Tip	.15
17205—Operating Sleeve Tip Pin	.05
19005—Operating Sleeve Tip complete	.20
[illegible]	5 25
[illegible] Guard and Shank	5 25
[illegible]	.25
[illegible]	.50
[illegible] Screw	.30
15705—Take Down Screw Bushing	.15
15805—Take Down Screw Stop Pin	.05
8105—Receiver complete	14 50
11805—Sear	.30
11905—Sear Spring	.05
[illegible] Take Down Screw Lock	.45
17605—Timing Lever	.50
17705—Timing Lever Spring	.10
17805—Timing Lever Spring Screw	.05
8705—Trigger	.85
17905—Trigger Lock	.25
18005—Trigger Lock Plunger	.05
18105—Trigger Lock Plunger Spring	.05
19105—Trigger Lock Plunger complete	.10
[illegible]	[illegible]
[illegible] Trigger Pin	.05
[illegible] Trigger Spring	.10



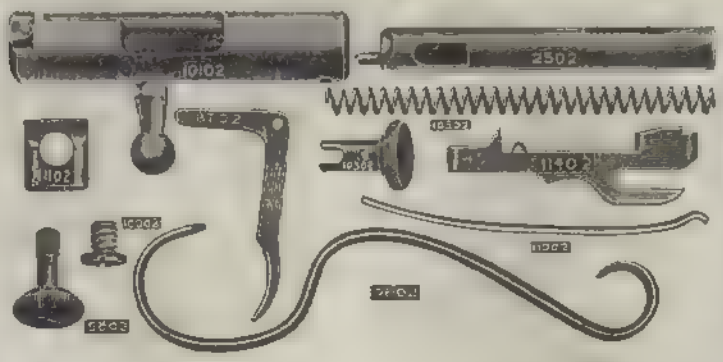
FOR MODEL 1907, SELF-LOADING

Nos.	Each
18107—Bolt Spring	$0 15
[illegible]	[illegible]
[illegible] Buffer Washer	[illegible]
[illegible] Bolt Stock	2 40
[illegible] Bolt [illegible]	.50
[illegible] Butt Plate Screws (2), each	.05
[illegible] Butt Stock complete	3 00
[illegible]	.30
15507—Butt Stock Bolt Washer	.05
15707—Butt Stock Bolt complete	.35
[illegible]	.00
4907—Forearm Tip	1 40
18207—Forearm Tip Nut Plunger	.05
18307—Forearm Tip Nut Plunger Spring	.05
18607—Forearm Tip complete	1 50
18407—Forearm Tip Nut	.30
18507—Forearm Tip Key	.05
6307—Hammer	1 00
[illegible] Hammer Pin	.15
14307—Hammer Spring	.10
15907—Hammer Spring Guide Rod	.20
16007—Hammer Spring Guide Rod Pin	.05
[illegible]	[illegible]
7907—Magazine Spring	.25
7807—Magazine Follower	.45
16207—Magazine Follower Roll	.05
16307—Magazine Follower Roll Pin	.05
7907—Magazine complete	1 50
[illegible] Magazine Lock	.50
16707—Magazine Lock Screw	.05

Nos.	Each
16807—Magazine Lock Spring	$0 05
16907—Operating Sleeve	.75
17007—Operating Sleeve Spring	.10
17107—Operating Sleeve Tip	.20
17207—Operating Sleeve Tip Pin	.05
19007—Operating Sleeve Tip complete	.25
6207—Receiver	8 25
13607—Guard with Shank	5 25
13707—Guard Shank	.25
4607—Ejector	.50
15607—Take Down Screw	.30
15707—Take Down Screw Bushing	.15
15807—Take Down Screw Stop Pin	.05
8107—Receiver complete	.14 50
11607—Sear	.30
11807—Sear Spring	.05
17307—Take Down Screw Lock	.45
17607—Timing Lever	.50
17707—Timing Lever Spring	.10
17807—Timing Lever Spring Screw	.05
8707—Trigger	.85
17907—Trigger Lock	.25
18007—Trigger Lock Plunger	.05
18107—Trigger Lock Plunger Spring	.05
19107—Trigger Lock Plunger, complete	.10
8807—Trigger Pin	.05
8907—Trigger Spring	.10

COMPONENT PARTS OF SINGLE SHOT RIFLES AND PISTOLS

In Ordering, give Model and Name of Rifle and Name and Number of Part



FOR WINCHESTER, MODEL 1902

Nos.	Each
102—Barrel	$3 45
3002—Butt Stock	1 45
3102—Butt Plate	20
3202—Butt Plate Screws (2), each	.05
9602—Guard Bow	.25
9702—Guard Bow Screws (2), each	.05
8702—Trigger	20
8803—Trigger Pin	.05
9802—Stock Stud Screw	.05
9902—Stock Stud Screw Stop	.05
10003—Stock Stud Screw Escutcheon	.10
2902—*Butt Stock complete*	2 50

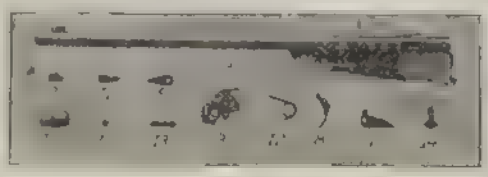
Nos.	Each
10102—Bolt with Handle	$0 70
2502—Firing Pin	.00
10202—Firing Pin Guide Pin	05
10302—Firing Pin Head	.10
10402—Firing Pin Head Pin	.05
10502—Firing Pin Spring	10
11302—*Bolt complete*	1 10
10602—Gear and Extractor	35
10702—Friction Pin	05
11402—*Gear and Extractor complete*	40
10802—Front Sight	20
10902—Rear Sight	15
11002—Gear Spring	05
11102—Stock Stud	15

FOR WINCHESTER, MODEL 1904

Nos.	Each
104—Barrel	$4 50
3004—Butt Stock	2 00
3104—Butt Plate	.00
3204—Butt Plate Screws (2), each	.05
9604—Guard Bow	.30
9704—Guard Bow Screws (2), each	.05
8704—Trigger	.22
8804—Trigger Pin	05
9904—Stock Stud Screw	05
9004—Stock Stud Screw Stop	$0 05
10004—Stock Stud Screw Escutcheon	.10
2904—*Butt Stock complete*	3 00
10104—Bolt with Handle	70
2504—Firing Pin	00
10204—Firing Pin Guide Pin	05
10304—Firing Pin Head	.10

Nos.	Each
10404—Firing Pin Head Pin	$0 05
10504—Firing Pin Spring	10
11304—*Bolt complete*	1 00
10804—Sear and Extractor	35
10704—Bolt Pin	05
11404—*Sear and Extractor, complete*	40
10804—Front Sight	20
10904—Rear Sight	00
11004—Sear Spring	05
11104—Stock Stud	15

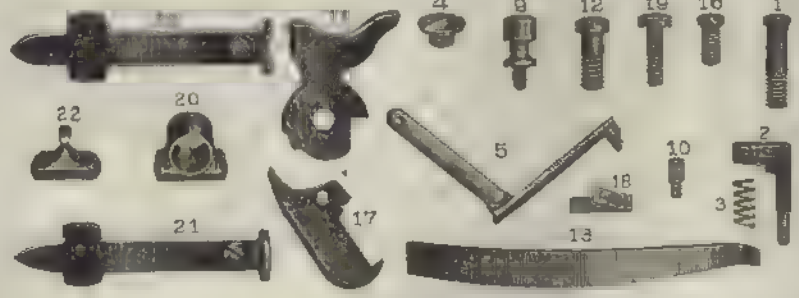
FOR HAMILTON RIFLES, MODELS 27 AND 027



Nos.	Each
1—Barrel, complete	$1 00
2—Stock, complete (no cut)	.75
3—Stock only	.25
4—Forearm (no cut)	.10
5—Rear Sight	08
6—Rear Sight Screw	01
7—Front Sight	02
8—Trigger	10
9—Hammer	10
10—Breech Block	15
11—Thumb Screw	05
12—Main Spring	$0 00
13—Firing-pin	05
14—Take-Down Screw	08
15—Extractor	12
16—Breech-block, complete, consisting of Nos. 10, 11 and 13 (no cut)	25
17—Working parts complete, consisting of Nos. 8, 9, 10, 11, 12, 13, 14, 15, (no cut)	80
18—Walnut Stock for No. 027	85
19—Forearm for No. 027	12

FOR STEVENS PISTOLS, Nos. 41, 42 and 43

In Ordering, give Caliber and Number of Pistol and Name and Number of Part.



Nos.	Each
Barrel with sight for No. 41	$1 00
6 in. Barrel for No. 43 without sights	3 50
10 in. Barrel for No. 43 and No. 43 without sights	4 50
1—Barrel Screw	10
2—Barrel Catch	20
3—Barrel Catch Spring	05
4—Barrel Catch Nut	10
5—Extractor and Bar	40
6—Extractor Pin	05
7—Frame No. 41	1 25
8—Frame No. 42-43	1 75
9—Firing Pin	25
10—Firing Pin Screw	05
11—Hammer	35

Nos.	Each
12—Hammer Screw	$0 05
13—Main Spring	15
14—Rest No. 42	1 00
15—Stocks No. 41, per pair	40
For Nos. 42-43, per pair	50
16—Stock Screw	05
17—Trigger	30
18—Trigger Spring	05
19—Trigger Screw	05
20—Globe Front Sight Nos. 42-43	50
21—Peep Rear Sight Nos. 42-43	50
22—Open Front Sight Nos. 42-43	50
23—Open Rear Sight Nos. 42-43	50

FOR STEVENS PISTOLS, Nos. 35, 40 and 40½

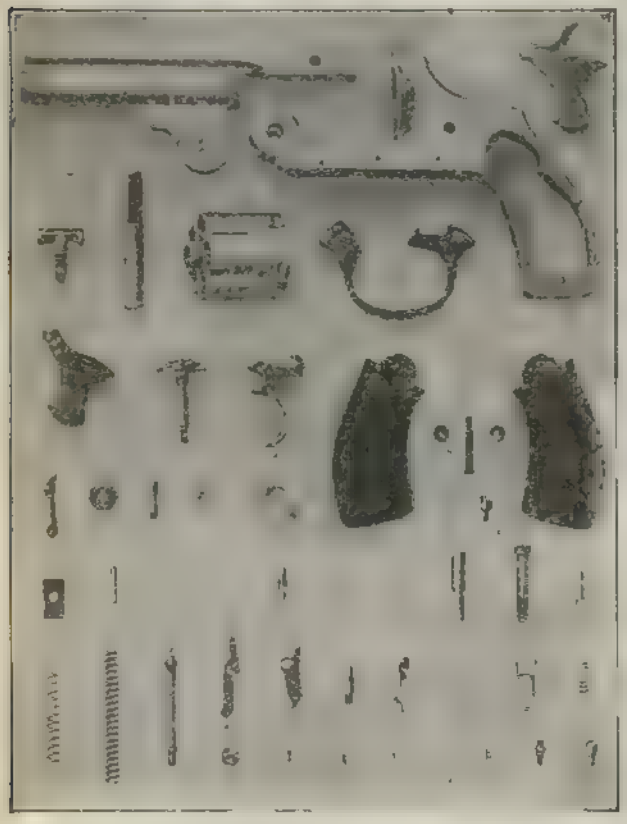
	Each
6 in. Barrel without sights for No. 35 or No. 40	$4 00
8 in. Barrel without sights for No. 35 or No. 40	4 50
10 in. Barrel without sights for No. 35 or No. 40	$5 00
12 in. Barrel without sights for No. 40	5 50
15 in. Barrel without sights for No. 40	6 25
18 in. Barrel without sights for No. 40	7 00

Nos.	Each
1—Barrel Screw	$0 10
2—Barrel Catch	35
3—Barrel Catch Spring	05
4—Barrel Catch Nut	10
5—Butt Plate No. 40-40½	40
6—Butt Plate Screw	05
7—Extractor and Bar	60
8—Frame	3 50
9—Firing Pin	20
10—Firing Pin Screw	05
11—Hammer	80
12—Hammer Screw	05
13—Main Spring	15
14—Rest No. 40-40½	2.00
15—Rest Screw	10
16—Stocks, per pair	1.00
17—Stock Screw	05
18—Trigger	40
19—Trigger Screw	05
20—Trigger Spring	05

Nos.	Each
21—Trigger Spring Screw	$0 05
22—Trigger Guard	1 00
23—Trigger Guard Screw Front	05
24—Trigger Guard Screw Rear	05
25—Bead Front Sight No. 35	50
26—Sporting Rear Sight No. 5	75
27—Sporting Rear Sight Step No. 35	20
28—Combination Globe Front Sight No. 40	1 25
29—Combination Rear Folding Sight No. 40	1 25
30—Beach Combination Front Sight No. 40½	1 00
31—Open Rear Sight No. 40½	25
32—Vernier Peep Sight No. 40½	3 00

COMPONENT PARTS OF IVER JOHNSON REVOLVERS

In Ordering, state whether for Hammer or Hammerless Revolvers; give Caliber, whether 22, 32 or 38; state Number of Shots, whether 5, 6 or 7; give Name and Number of Part and state whether for Nickel or Blued and if possible send worn or old Part



FOR SAFETY HAMMER AUTOMATIC REVOLVERS

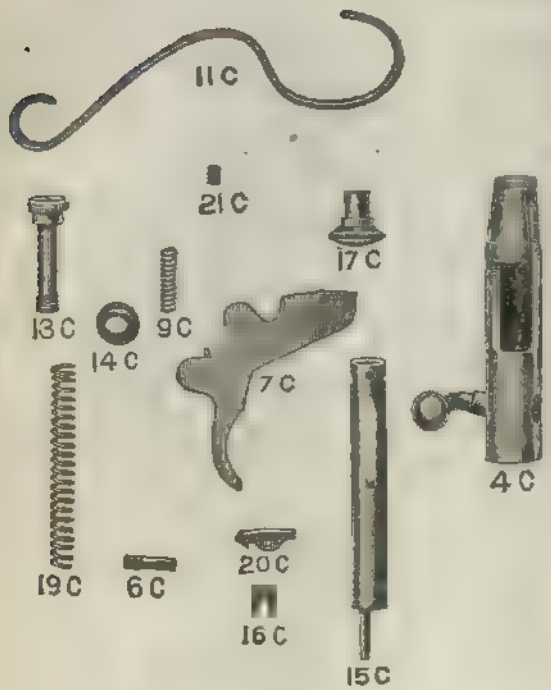
Nos.	Each
200—Frame	$1 40
201—Firing Pin	05
202—Firing Pin Nut	04
203—Firing Pin Spiral Spring	.02
204—Firing Pin (for 22 Cal. only)	.05
205—Firing Pin Spiral Spring (for 22 Cal. only)	.02
206—Firing Pin, Stop Pin (for 22 Cal. only	.02
207—Joint Screw	.05
208—Guard	.30
209—Guard Pin, front	.02
210—Guard Pin, rear	.02
211—Stock, left	.15
212—Stock, right	.15
213—Head Escutcheon	.02
214—Thread Escutcheon	.03
215—Stock Screw	.04
216—Stock Pin	.02
217—Barrel, 2 inch cycle	1 50
218—Barrel, 3 inch	1.50
219—Barrel, 3¼ inch	1 50
220—Barrel, 4 inch	2 10
221—Barrel, 5 inch	2 75
222—Barrel, 6 inch	3 37
223—Sight	04
224—Barrel Catch	.25
225—Barrel Catch Bolt	.08
226—Barrel Catch Spiral Spring	.02
227—Barrel Catch Screw	.04
228—Cylinder	85
229—Quill	$0 12
230—Cylinder Stop	.15
231—Cylinder Stop Pin	02
232—Cylinder Stop Spiral Spring	02
233—Extractor	10
234—Extractor Stem	10
235—Extractor Spiral Spring	04
236—Extractor Cam	15
237—Extractor Cam Bushing	02
238—Extractor Cam Bushing Spiral Spring	02
239—Hammer	35
240—Hammer Screw	04
241—Main Spiral Spring	10
242—Main Spiral Spring Tension Adjusting Bar	15
243—Main Spiral Spring Ball Plunger	20
244—Main Spiral Spring Ball Plunger Pin	.20
245—Lever and Pin	.08
246—Lever Wire Spring	.02
247—Lifter	.15
248—Trigger	.40
249—Trigger Wire Spring	.08
250—Trigger Pin	.02
251—Wood Stock End Screw	.08
252—Wood Stock End Screw Escutcheon	05
253—Sear	.08
254—Sear Spiral Spring	.02
255—Semi Hammerless Hammer	35

FOR SAFETY HAMMERLESS AUTOMATIC REVOLVERS

Nos.	Each
400—Frame	$1 40
401—Firing Pin	05
402—Firing Pin Nut	04
403—Firing Pin Spiral Spring	.02
404—Firing Pin (for 22 Cal. only)	05
405—Firing Pin Spiral Spring (for 22 Cal. only)	02
406—Firing Pin Nut (for 22 Cal. only)	05
407—Joint Screw	05
408—Guard	30
409—Guard Pin, front	02
410—Guard Pin, rear	02
411—Stock, left	15
412—Stock, right	15
413—Head Escutcheon	02
414—Thread Escutcheon	03
415—Stock Screw	04
416—Stock Pin	02
417—Barrel, 2 inch cycle	1 50
418—Barrel, 3 inch (32 Cal. only)	1.50
419—Barrel 3¼ inch (38 Cal. only)	1 50
420—Barrel, 4 inch	2 10
421—Barrel, 5 inch	2 75
422—Barrel, 6 inch	3.37
423—Sight	.04
424—Barrel Catch	.25
425—Barrel Catch Bolt	.08
426—Barrel Catch Spiral Spring	02
427—Barrel Catch Screw	$0 04
428—Cylinder	85
429—Quill	12
430—Cylinder Stop	15
431—Cylinder Stop Pin	02
432—Cylinder Stop Spiral Spring	02
433—Extractor	40
434—Extractor Stem	.10
435—Extractor Spiral Spring	04
436—Extractor Cam	.15
437—Extractor Cam Bushing	02
438—Extractor Cam Bushing Spiral Spring	02
439—Hammer	35
440—Hammer Screw	04
441—Main Spiral Spring	10
442—Main Spiral Spring Tension Adjusting Bar	10
443—Main Spiral Spring Ball Plunger	.20
444—Main Spiral Spring Ball Plunger Spring	.02
445—Lever and Pin	08
446—Lever Wire Spring	02
447—Lifter	15
448—Trigger	04
449—Trigger Wire Spring	08
450—Trigger Pin	02
451—Wood Stock End Screw	08
452—Wood Stock End Screw Escutcheon	05

COMPONENT PARTS OF SINGLE SHOT RIFLES

FOR MODELS 1904 AND 1905 SAVAGE RIFLES



Except where Parts are Specified Separately for Models 1904 and 1905 Rifles, Prices on each remain the same

In Ordering, give the Name and Number of Part, also Model, Caliber and Number of Rifle

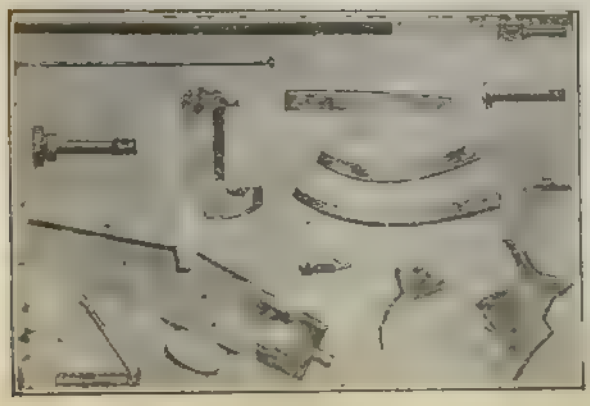
Nos.	Each
1C—Barrel, Model 1904	$1 50
2C—Barrel, Model 1905	2 00
6C—Bolt Pin	05
4C—Breech Bolt	80
3C—Breech Bolt, Complete	1 00
5C—Breech Bolt Handle	25
26C—Butt Plate, Model 1904	30
28C—Swiss Butt Plate, Model 1905	60
29C—Butt Plate Screw	05
22C—Butt Stock, Complete, Model 1904	1 00
23C—Swiss Butt Stock, Complete, Model 1905	1 50
24C—Butt Stock, Wood only	75
14C—Escutcheon	15
20C—Extractor	20
21C—Extractor Spring	15
Front Sight, Model 1904	25
Front Sight, Model 1905, Ivory Bead	1 00
11C—Guard	.20
10C—Guard Screw	05
15C—Hammer	75
16C—Hammer Washer	.15
19C—Mainspring	.20
Rear Sight, Model 1904	.15
Rear Sight, Model 1905, Micrometer	1 25
13C—Take Down Screw	25
17C—Thumb Piece	25
7C—Trigger	40
9C—Trigger Spring	.15
12C—Trigger Pin	03

(Our Nos. 422 and 432)
FOR *Remington-UMC* No. 4

When Ordering, give Name and Number of Rifle, also Name or Number of Part and Caliber

Nos.	Each
J 1—Barrel Without Sights	$4.00
J 2—Breech Block	.75
J 3—Breech Block Screw	10
J 4—Butt Plate	50
J 5—Butt Plate Screw	10
J 6—Butt Stock	1 25
J 7—Extractor Screw	05
J 8—Escutcheon Head	10
J 9—Escutcheon Nut	.10
J10—Extractor	50
J11—Extractor Pin	05
J12—Firing Pin	20
J13—Frame	2 50
J14—Hammer	60
J15—Hammer Roll	05
J16—Hammer Roll Pin	05
J17—Hammer Screw	$0.10
J18—Locking Lever	.25
J19—Locking Lever Stop Pin	05
J20—Locking Pin	05
J21—Mainspring	40
J22—Mainspring Screw	05
J23—Tang Screw	10
J24—Tip Stock	1 00
J25—Tip Stock Screw	05
J26—Trigger	50
J27—Trigger, Block and Extractor Spring	.25
J28—Trigger Pin	.05
J29—Trigger Spring Screw	05
J30—Wiping Rod	.15

FOR *Remington-UMC* No. 6



When Ordering, give Name and Number of Rifle, also Name or Number of Part and Caliber of Rifle

Nos.	Each
S 1—Barrel, no Sights	$2.50
S 2—Block Spring	.20
S 3—Block Spring Screw	10
S 4—Block Stop Pin	05
S 5—Blank Thumb Piece	15
S 6—Breech Block	50
S 7—Breech Block Pin	10
S 8—Butt Plate	.35
S 9—Butt Plate Screws (2), each	.10
S10—Butt Stock	1 00
S11—Butt Stock Washer	.05
S12—Extractor	.20
S13—Extractor Stop Pin	05
S14—Firing Pin	15
S15—Frame Complete with Guard, etc	1 00
S16—Front Sight	20
S17—Hammer	$0 35
S18—Mainspring	.30
S19—Mainspring Screw	.10
S20—Peep Sight Base	.20
S21—Peep Sight Base Screw	.06
S22—Peep Sight Leaf	.25
S23—Peep Sight Leaf Pin	.06
S24—Pins (5)	.06
S25—Rear Sight	.25
S26—Sear Spring	.20
S27—Stock Bolt	.15
S28—Thumb Screw	.20
S29—Tip Escutcheon	.10
S30—Tip Screw	.10
S31—Tip Stock and Escutcheon	.50
S32—Trigger	.80
S33—Wiping Rod	.15

COMPONENT PARTS OF MARLIN REPEATING RIFLES

In Ordering, give Model, Caliber and Number of Rifle and Name or Number of Part

FOR MODEL 1893, SOLID FRAME

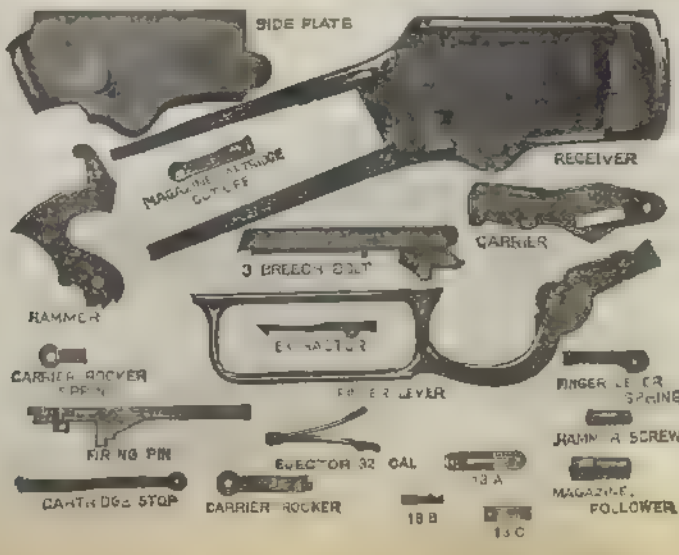
	Each
Barrel, Carbine, 20-inch, Grade "B,"	$5 50
(a) Barrel Carbine 20-inch Smokeless Steel	7 00
Barrel, Round rifle, 26-inch, Grade "B"	6 25
(a) Barrel Round rifle 26-inch Smokeless Steel	8 25
Barrel, Oct. or ½ Oct Rifle, 26-inch, Grade "B"	8 00
(a) Barrel Oct. or ½ Oct. Rifle 26-inch Smokeless Steel	10 00
Barrels, extra length, per two inches	2.00
4—Breech Bolt	2 50
Buttstock	1 00
Buttplate	80 80
Buttplate Screws (2) each	10
8—Carrier	2 00
9—Carrier Screw	15
10—Carrier Rocker	.45
Carrier Rocker Pin	.10
Carrier Rocker Spring	.10
13—Extractor	.30
Extractor Pin	.10
15—Ejector	20
16—Firing Pin, (2 pieces)	$0 60
(a) Long Firing Pin	40
(b) Short Firing Pin	20
17—Firing Pin Spring	10
Firing-Pin Pin	.10
19—Finger Lever (with Plunger)	2 00
20—Finger Lever Screw	.5
Forearm	75
22—Forearm Tip	60
23—Forearm Tip Tenon	35
24—Forearm Tip Tenon Screw (2) each	.10
25—Hammer	60
26—Hammer Screw	15
27—Locking Bolt	75
28—Mainspring	35
29—Mainspring Screw	.10
Magazine Tube	1 60
Magazine Tube Spring	.30
32—Magazine Tube Spring Follower	.20
33—Magazine Tube Plug	.25
34—Magazine Tube Stud	.40
35—Magazine Tube Stud Screw	.15
36—Receiver	9 00
37—Loading Spring Cover	.50
38—Loading Spring Cover Screw	.10
39—Trigger	.45
Trigger Pin	.10
41—Trigger Spring	.30
42—Trigger Spring Screw	.10
43—Trigger Plate	2 00
44—Trigger Plate Screw	.16
Trigger Plate Support Screw	.15
46—Tang Screw	.15
Dummy Screw (to fill Sight Screw Hole in tang or in top of Receiver)	.10
Front Band for Carbine	80
Front Band Screw for Carbine	.15
Rear Band for Carbine	.35
Rear Band Screw for Carbine	.15
Sling Ring and Staple for Carbine	.40
Stock Swivel and Screw	.40
Tip Swivel	.40

FOR MODEL 1893, TAKE-DOWN

Same as Parts for Model 1893 Solid Frame, Except:

	Each
Barrel, 26 in., Round, Grade "B"	$7 00
Barrel 26 in., Octagon, Grade "B"	8.50
Barrel, 26 in., Round Smokeless Steel	9 00
Barrel 26 in., Octagon, Smokeless Steel	10 50
Extra length over standard, per 2 inches	.60
Cam Lever	1 00
Cam Lever Screw	$1 00
Magazine Tube	1 60
Magazine Tube Spring	.30
Magazine Tube Spring Follower	.20
Magazine Tube Plug (inside)	.35
Magazine Tube Plug (inside), Grooved	.30
Magazine Tube Latch	$0 75
Magazine Tube Latch Spring	.15
Receiver	9 50
Trigger Plate	2 00
Yoke	1 75

FOR MODEL 1892, SOLID FRAME



	Each
Barrel, Octagon, Grade "B"	$6 25
Barrel, Octagon or Half Octagon, Smokeless Steel	8 00
Barrel, extra length, per two inches	.2 00
Barrel Band	.2 00
Buttstock	80
Buttstock Plate	80
Buttstock Plate Screws (2), each	10
Carrier	30
Carrier Lever	35
Carrier Lever Spring	15
Carrier Lever Spring Screw	10
Carrier Rocker Pin	10
Carrier Pivot Pin	10
Cartridge Guide, (22 cal. only)	15
Cartridge Guide Spring	25
Cartridge Guide Spring Screw	10
Cartridge Stop (.22 cal. only)	25
Cartridge Stop Screw	10
Dummy Screw (to fill Sight Screw Hole in tang and top of Receiver)	10
Ejector, 32 caliber	
Ejector, .22 cal. old style like 32	
Ejector parts .22 old style	
18 A Ejector Rod	
18 B Ejector Screw	
18 C Ejector Spring	
Ejector Screws 2 each	
Ejector Pin	
Extractor	
Finger Lever	
Finger Lever Spring	
Finger Lever Spring Screw	$0
Firing Pin	
Firing Pin Spring	
Firing Pin Pin	
Forearm	75
Forearm Tip	60
Forearm Tip Tenon	
Forearm Tip Tenon Screws (2) Each	
Hammer	60
Hammer Screw	15
Magazine Cartridge Cut-off	40
Magazine Cartridge Cut-Off Screw	
Magazine Tube (outside)	
Magazine Tube Guide	70
Magazine Tube Inside	
Magazine Tube Latch Spring	15
Magazine Tube Plug	
Magazine Tube Plug (inside)	
Magazine Tube Plug (outside)	
Magazine Tube Spring	
Magazine Tube Spring Follower	
Magazine Tube Stud	
Magazine Tube Stud Screw	15
Main Spring	
Main Spring Screw	10
Receiver	7 00
Side Plate	
Side Plate Screw	
Side Plate Screw Collar	10
Tang Screw	15
Trigger	45
Trigger Pin	10
Trigger Spring	20
Trigger Spring Screw	.10

Parts of Model 1892 are the same as for Model 1891, with exception of trigger pin, breech bolt, trigger and trigger spring. These parts are the same, with exception of trigger, which is 30 inch longer in present pattern, and in the 1891, instead of in one piece as in the 1892.

COMPONENT PARTS OF MARLIN REPEATING RIFLES

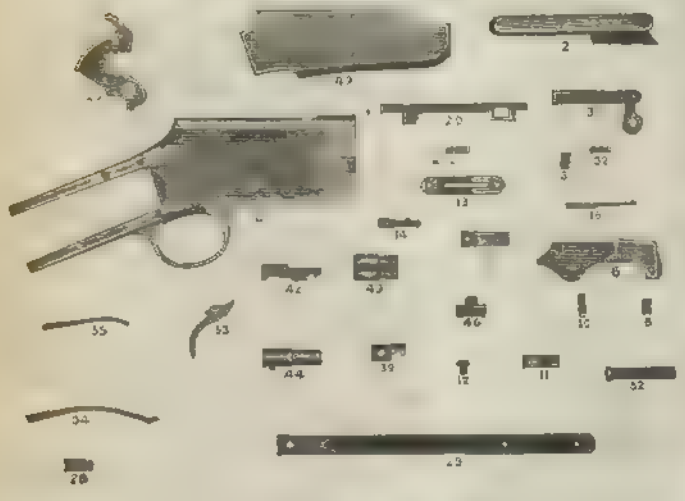
In Ordering, Give Model, Caliber and Number of Rifle, and Name and Number of Part

FOR MODEL 1897, TAKE-DOWN

Nos.	Each
Barrel (Round), 24-inch	$4 25
Barrel (Oct. or Half Oct.), 24 inch	5 00
In. extra length per two	2 00
3-Breech Bolt	3 00
Receiver	1 00
Base plate	50
Base plate Screws (2) each	10
7-Carrier	1 00
Carrier Stop Pin	10
9-Carrier Plunger Spring	10
Carrier Plunger Screw	10
Cartridge Guide	25
Cartridge Guide Spring	25
Cartridge Guide Spring Screw	10
Dummy Screw for Side Plate Screw Hole in tang and Cap of Receiver each	10
12-Extractor	30
13-Ejector complete, old style	50
Ejector parts, new style	
13A. Ejector Base	20
13B. Ejector Wing	30
13C. Ejector Spring	15
Ejector Screws (2), each	10
Ejector Pin	10
14-Firing Pin	20
15-Finger Lever	1 75
16-Finger Lever Screw	15
17-Finger Lever Spring	25
Finger Lever Spring Screw	15
19-Cartridge Stop	25

Nos.	Each
Cartridge Stop Screw	$0 10
Forearm	75
Forearm Tip	60
Forearm Tip Tenon	35
Forearm Tip Tenon Screws (2), each	10
25-Hammer	60
Hammer Screw	25
Magazine Cartridge Cut-Off	50
Magazine Cartridge Cut-Off Screw	10
Magazine Tube Outside	1 50
Magazine Tube Inside	1 50
Magazine Tube Label	30
Magazine Tube Latch Spring	15
Magazine Latch Pin	10
Magazine Tube Plug (inside)	25
Magazine Tube Plug (outside)	25
Magazine Tube Spring	25
36-Magazine Tube Spring Follower	30
Magazine Tube Stud	25
Magazine Tube Stud Screw	15
Main Spring	35
Mainspring Screw	10
41-Receiver, Left Side	3 00
42-Receiver, Right Side	3 00
Tang Screw	15
Trigger Screw	30
Trigger Screw Collar	10
Trigger	45
Trigger Pin	10
Trigger Spring	20
Trigger Spring Screw	10

FOR MODEL 25. TAKE-DOWN



Nos.	Each
Barrel	$5 00
2-Breech Bolt	2 00
Firing Pin	1 00
Base plate	75
Base plate Screws (2), each	10
6-Carrier	2 00
Carrier Pin	10
Carrier Stop Pin	10
Cartridge Cut-Off	45
Cartridge Cut-Off Screw	10
Cartridge Guard Base	35
Cartridge Guard Base Screw	10
Cartridge Guard Loop	40
Cartridge Guard Leaf Spring	15
Cartridge Guard Leaf Spring Rivet	10
Cartridge Guard Hinge Pin	10
11-Cartridge Guide Spring	05
12-Cartridge Guide Spring Screw	10
13-Ejector Base	60
14-Ejector Wing	50
Ejector Screws (2) each	10
Ejector Pin	10
17-Ejector Spring	15
18-Extractor	60
Extractor Screw	10
20-Firing Pin	35
21-Firing Pin Spring	15
Forearm	80
Forearm Screws (2), each	15
Forearm Screw Escutcheons (2), each	15
25-Hammer	80

Nos.	Each
Hammer Roller	$ 20
Hammer Roller Pin	10
28-Hammer Screw	20
29-Handle Slide	75
30-Locking Bolt	75
31-Locking Bolt Plunger	20
32-Locking Bolt Plunger Spring	15
Locking Bolt Plunger Pin	10
34-Main Spring	30
Main Spring Screw	10
Magazine Tube (Inside)	1 40
Magazine Tube (Outside)	1 40
Magazine Spring	20
39-Magazine Plug (Inside)	25
40-Magazine Plug (Outside)	25
42-Magazine Latch	50
Magazine Latch Pin	10
Magazine Latch Spring	15
44-Magazine Follower	30
Magazine Follower Pin	10
46-Magazine Tube Stud Screw	10
48-Receiver	4 00
49-Side Plate	60
Side Plate Screw	10
Side Plate Screw Collar	10
52-Tang	20
54-Trigger	45
Trigger Pin	10
55-Trigger Spring	20
Trigger Spring Screw	10

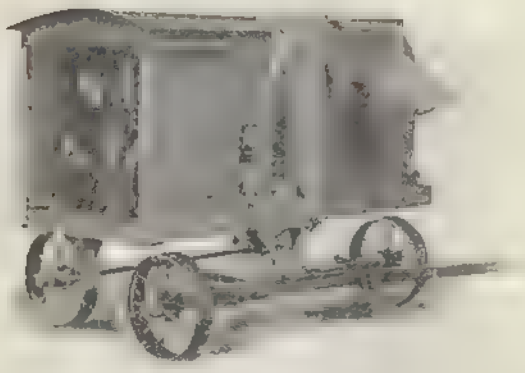
FOR MODEL 20. TAKE-DOWN

Nos.	Each
1-Barrel (Octagon)	$5 00
2-Breech Bolt	2 00
3-Firing Pin	1 50
4-Base Plate	75
5-Base Plate Screws (2) each	10
6-Carrier	2 00
7-Carrier Pin	10
8-Carrier Stop Pin	10
9-Cartridge Cut-Off	45
10-Cartridge Cut-Off Screw	10
11-Cartridge Guard Base	35
12-Cartridge Guard Base Screw	10
13-Cartridge Guard Loop	40
14-Cartridge Guard Leaf Spring	15
15-Cartridge Guard Leaf Spring Rivet	10
16-Cartridge Guard Hinge Pin	10
17-Firing Guard Spring	05
18-Cartridge Guide Spring Screw	10
19-Extractor Screws (2) Bolt Screw Hole in Tang and top of Receiver each	10
20-Extractor	60
21-Extractor Spring	10
22-Ejector Screws (2) each	10
23-Ejector Pin	05
24-Ejector Spring	15
25-Firing Pin	05
26-Firing Pin Screw	10
27-Firing Pin	05
28-Firing Pin Spring	05
29-Forearm	75
30-Forearm Screws (2) each with escutcheons	1
31-Forearm Screw Escutcheons (2), each	15
32-Hammer	60

Nos.	Each
33-Hammer Roller	$ 20
34-Hammer Roller Pin	10
35-Hammer Screw	20
36-Handle	75
37-Locking Bolt	75
38-Locking Bolt Plunger	20
39-Locking Bolt Plunger Spring	15
40-Locking Bolt Plunger Screw	10
41-Mainspring	30
42-Mainspring Screw	10
44-Magazine Tube (Inside)	1 50
45-Magazine Tube (Outside)	1 50
46-Magazine Spring	25
48-Magazine Plug (Inside)	25
47-Magazine Plug (Outside)	25
48-Magazine Latch	50
49-Magazine Latch Pin	10
50-Magazine Latch Spring	15
51-Magazine Follower	30
52-Magazine Follower Pin	10
53-Magazine Tube Stud	25
54-Magazine Tube Stud Screw	10
55-Receiver, Left Side	4 00
56-Receiver, Right Side	4 00
57-Receiver Dowel Stud	20
58-Tang Screw	15
59-Trigger	45
60-Trigger Pin	10
61-Trigger Spring	20
62-Trigger Spring Screw	10
63-Thumbscrew	20
64-Thumbscrew Collar	10

Note.—When ordering parts state whether rifle is marked on upper tang "Model 20" or "Model 20-S," and whether full or take-down.

CONCRETE BATCH MIXERS



NORTHWESTERN PAVING MACHINES, MODEL 705

For contractors on bridge piers, floor slabs, pavements and alley work where end discharging Machine is a great time saver.

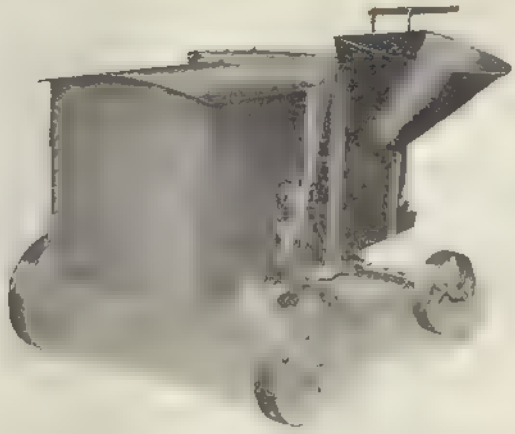
Each

No. 4-705—Capacity 5 Cu. Ft. loose material, equipped with 3½ Horse Power Water Cooled Engine, Four Cycle Jump Spark Ignition; Extreme Length of Frame 80 in., Width 60 in. Standard Wagon Track; All Wheels 18 in. Diam.; Mixer will turn within its own length; Complete with Team Pole $560.00

Weight 2295 Lbs. Each

No. 4-710—Same design as Model 705; Capacity 10 Cu. Ft.; 6½ Horse Power Engine; All Wheels 18 in. Diam; Complete with Team Pole.....1150.00

Weight 4000 Lbs. Each



NORTHWESTERN PAVING MACHINES, MODEL 605

With Gate Batch Hopper Only

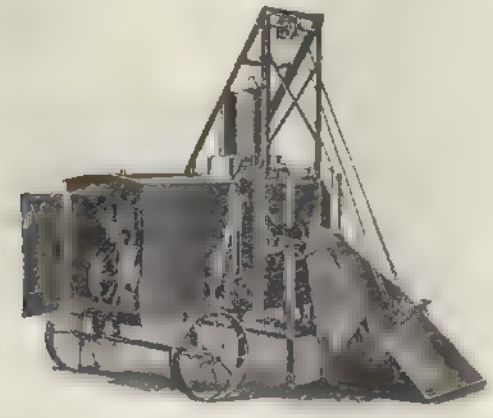
This Mixer has standard equipment throughout, with special Gate Batch Hopper for measuring the amount of material before it goes into the Drum, especially recommended for railroad work and sidewalk construction under engineers' supervision.

Each

No. 4-605—Capacity 5 Cu. Ft. loose material; 3½ Horse Power Engine; Complete with Measuring Gate Batch Hooper; Weight 2350 Lbs. Each.....$574.00

Without Mixer; Weight 75 Lbs. Each..... 44.00

Water Tank and Frame, Extra; Weight 70 Lbs. Each..... 33.00



NORTHWESTERN CONCRETE MIXER, MODEL 605

For general contractors' use who wish to complete 100 cubic yards per day; the use of Power Loader doubles the working capacity of this Machine and enables contractor to keep gang of eight men busy.

Equipped with Power Loader, Hoisting Drum, Frame and Cable, also Automatic Water Tank; the Power Loader has a Capacity of 5 Cu. Ft. loose material; 3½ Horse Power Water Cooled Engine.

Each

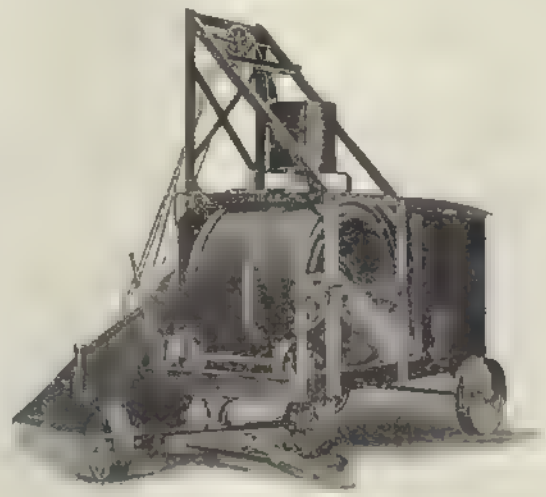
No. 6-605 Mixer on Steel Trucks with Engine and Housing, Automatic Water Tank and Frame, Power Loader with Supporting Frame, Cable and Hoisting Drum; Complete with Team Pole $770.00

Weight 2940 Lbs. Each

Add for Contractors Rotary Pump, with Belt and Pulley.... 66.00

Weight 100 Lbs. Each

This Outfit can be equipped with Builder's Auxiliary or Silo Hoist, Gear Driven Magneto or Electric Motor; Prices on application.



NORTHWESTERN CONCRETE MIXER, MODEL 610

Each

No. 6-610—Capacity 10 Cu. Ft. loose material, for the contractor who wishes to complete 130 yards a day; 6½ Horse Power Vertical Engine, with Water Cooled Hopper, Four Cycle Jump Spark; More Power than any similar Mixer; Complete with Gasoline Engine and Housing, Power Loader, Hoist and Frame, necessary Cable, Automatic 15 Gallon Water Tank and Frame and Team Pole... .. $1350.00

Weight 5155 Lbs. Each

Each

Extra for Measuring Batch Hopper; Weight 200 Lbs. Each..$ 90 00

Extra for Auxiliary or Silo Hoist; Weight 300 Lbs. Each... 110.00

CEMENT SIDEWALK TOOLS

The Ideas of practical Cement Workers have been carried out in their manufacture and the Shape, Material, Finish, etc., are Correct. **Bronze Metal Tools are the Most Satisfactory;** Edgers, Jointers, etc., fitted with 4 in. Maple Handles

JOINTERS

2¾ in. Wide, 6 in. Long, with both Ends Rounded; Cuts ½ in. Deep

Per Dozen

No. 1—Iron, Nickel Plated; Weight 14 Lbs. per Dozen.....$ 7.00

No. 01 Solid Bronze; Weight 17 Lbs. per Dozen 16 00

STRAIGHT END JOINTERS

This Tool makes Clean, Sharp Joints against the framework, as it has one Straight End, 3 in. Wide, 6 in. Long. Cuts ⅛ in. Deep.

Per Dozen

No. 5—Iron, Nickel Plated; Weight 16½ Lbs. per Dozen.....$ 8 00

No. 05—Solid Bronze; Weight 20 Lbs. per Dozen 17 00

DRIVEWAY GROOVERS

For making Grooves in driveways; Makes U-Shaped Groove, ⅜ in. Deep; Makes Wide Grooves so that horses will not slip; 3 in. Wide, 9 in. Long, both Ends Rounded.

Per Dozen

No. 7—Iron, Nickel Plated; Weight 24 Lbs. per Dozen.....$10 20

No. 07—Solid Bronze; Weight 27 Lbs. per Dozen 21 60

⅜ IN. RADIUS EDGERS

Edger is 2¾ in. Wide, 6 in. Long, both Ends Rounded; Has a ¾ in. Turned Edge, with Radius of ⅜ in.

Per Dozen

No. 2—Iron, Nickel Plated; Weight 14 Lbs. per Dozen ..... $ 7.00

No. 02—Solid Bronze; Weight 16 Lbs. per Dozen 16 00

⅜ IN. RADIUS, NARROW EDGER

This Edger is 1¾ in. Wide 8 in. Long, has a ¾ in. Turned Edge, with Radius of ⅜ in.

Per Dozen

No. 38—Iron, Nickel Plated; Weight 14 Lbs. per Dozen.....$ 8.00

No. 038—Solid Bronze; Weight 16 Lbs. per Dozen 17.00

¾ IN. RADIUS EDGER

This Edger is 3 in. Wide, 6 in. Long, both Ends Rounded; It has a 1 in. Turned Edge, with a Radius of ¾ in.

Per Dozen

No. 4—Iron, Nickel Plated; Weight 18 Lbs. per Dozen.....$ 8.00

No. 04—Solid Bronze; Weight 20 Lbs. per Dozen 17 00

CURBING EDGER

This Tool for edges of curbs, is 3½ in. Wide, 6¼ in. Long, with a slightly Oval Surface; It has a 1½ in. Turned Edge, with a Radius of 1½ in

Per Dozen

No. 100—Iron, Nickel Plated; Weight 19 Lbs. per Dozen.....$14.40

No. 0100—Solid Bronze; Weight 21 Lbs. per Dozen 21.60

BEVEL EDGER

This Edger is used to Bevel the edges of steps, walks, etc.; 2¾ in. Wide 6 in. Long; With ⅜ in. Bevel.

Per Dozen

No. 18—Iron, Nickel Plated; Weight 16 Lbs. per Dozen.....$ 7.00

No. 018—Solid Bronze; Weight 18 Lbs. per Dozen 16.00

SQUARE EDGER

This Edger is used for finishing the edges of steps, carriage blocks or walks where it is desirable to have the Edges Square; 3 in. Wide, 6 in. Long, both Ends Rounded; 1½ in. Cutting Edge

Per Dozen

No. 17—Iron, Nickel Plated, Weight 17 Lbs. per Dozen. $10 00

No. 017—Solid Bronze; Weight 20 Lbs. per Dozen 17.00

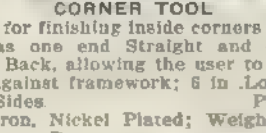
RADIUS TOOL

This Tool is used in laying out and finishing Curves and Circles; Its shape permits the finishing of either the inside or the outside of any size circular work.

Per Dozen

No. 23—Iron, Nickel Plated; Weight 6 Lbs. per Dozen..... $ 6 00

No. 023 Solid Bronze; Weight 8 Lbs. per Dozen 12.00



CORNER TOOL

Used for finishing inside corners of steps, etc. Has one end Straight and one end Curving Back, allowing the user to work in corner against framework; 6 in. Long, with 1½ in. Sides.

Per Dozen

No. 6—Iron, Nickel Plated; Weight 13 Lbs. per Dozen ..... .$ 7.00

No. 06—Solid Bronze; Weight 16 Lbs. per Dozen 16 00

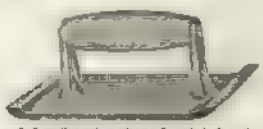
GUTTER TOOL

Used in making Gutters for drainage purposes; the ¼ in. Guides on the Sides allow the Tool to finish the Gutter with a uniform depth; 6 in. Long, 3½ in. Wide, 1 in. Deep.

Per Dozen

No. 8G Iron, Nickel Plated, Weight 21 Lbs. per Dozen.....$14.40

No. 08—Solid Bronze; Weight 23 Lbs. per Dozen 21.60



CORRUGATING TOOLS

Tools for the purpose of making a Rough Surface to prevent slipping; Used on sidewalks, driveways and stable floors, making Grooves ⅛ in. Deep, ⅜ in. Apart; It is 6 in. Long, 4½ in. Wide.

Per Dozen

No. 44—Iron, Nickel Plated; Weight 20 Lbs. per Dozen.....$14 00

No. 044—Solid Bronze; Weight 24 Lbs. per Dozen 24 00

TILE MARKERS

For making imitation of tiling in bathrooms, floors, etc; Used with a common lath for a Straight Edge and makes a fine job, as the Tool is under perfect control of the operator.

Per Dozen

No. 91—Iron, Nickel Plated; Length of Blade 3 in., Width of each Side of Blade ½ in., Length of Tool Overall 9½ in.....$7 00

Weight 5 Lbs. per Dozen

SQUARE CONCRETE TAMPERS

Made of good grade of Cast Iron, Japanned to prevent rusting, nicely finished, With 4 ft. Hardwood Handle

Nos.	8	10
Head, in.	8x8	10x10
Weight Each, Lbs.	19	17
Each	$3 00	3 60

Open Stock

All Above, One-Sixth Dozen in a Box, except No. 91, One Dozen in a Box

WOOD BOATS

Shipped Direct from Eau Claire Wisconsin

SPECIAL BOAT FOR OUTBOARD MOTOR

This Boat is of Special Design and Construction, and highly recommended for use with the outboard motors.

Although any ordinary row boat can be driven with one of these motors, it is generally conceded that in order to obtain the **best results** it requires a boat of heavier construction provided with a wide and nearly flat stern section to prevent the stern from drawing down when running.

In building this the designers have succeeded in getting out a Boat that will be a revelation to those desiring a Boat of the highest quality. It is extremely steady, roomy and sea-worthy, **handles easily with a pair of oars and will carry six persons.**

The frame work is made from selected **White Oak**, Ribs are 1½ in., spaced 6 in. centers; Transom 1½ in. Oak, reinforced, with Iron Bolts; Decking and Coaming, Selected Oak; Gunwales **with Galvanized Fastenings;** Interior of Boat is provided **with three Cross Seats** 12 in. Wide, and **Stern Seat** large enough to allow the operator ample seating room; One pair Leathered and Varnished Oars and two pairs Oar Locks furnished with each Boat.

Seats are made from clear selected Cedar or Spruce, finished natural with two coats spar Varnish; the Inside of Boat is painted two coats Marine Green; Outside is thoroughly smoothed, joints caulked with Seine Twine; Seams, Nail and Screw Holes are filled with White Lead and entire outside painted three coats best Marine White; Decks and Gunwales finished natural with three coats Spar Varnish.

Each

+**No. 97—Length 16 ft., 48 in. Beam;** Depth at Bow 26 in., Depth at Stern 23 in., Depth Amidship 17 in.; Gunwales ⅝x1½ in.; Weight 240 Lbs. Each.....$72.00

+**No. 98—Length 18 ft., 50 in. Beam;** Depth at Bow 28 in., Depth at Stern 24 in., Depth Amidship 18 in.; Gunwales ⅝x1½ in.; Weight 300 Lbs. Each..... 90 00

FLAT BOTTOM FISHING AND HUNTING BOAT

Complete with one pair of Oars and Oar Locks; Especially designed for all around use and built for heavy service; **Can be used with any ordinary Outboard Motor;** Constructed of Selected Cypress. Built with Clinker Sides, two Strakes on each side; Painted two coats of Light Green, both outside and inside.

Each

+**No. 81—Length 16 ft., 46 in. Beam;** Depth 16½ in.; Weight 255 Lbs. Each.....$40.00

STANDARD SQUARE STERN ROW BOAT

Complete with One Pair of 7 ft. Spruce Oars and Two Pairs of Oar Locks of Special Design; Iron Stem Band and Seat Braces; These Boats are provided with Iron Bolts through edge of Transom and can be used with an Outboard Motor, **is so desired.**

Each

+**No. 14—Length 14 ft., 44 in. Beam,** Depth Forward 23 in., Depth Amidship 14½ in., Depth Aft 20 in.; Weight 165 Lbs. $43.00

+**No. 16—Length 16 ft., 46 in. Beam,** Depth Forward 24 in., Depth Amidship 16½ in., Depth Aft 21 in.; Weight 185 Lbs. 48.00

Specifications—Entire Frame and Transom made of Clear Selected White Oak or Rock Elm; Planking is Clear Selected Cedar, fastened to Ribs with Galvanized Clout Nails; all Fastenings are Galvanized Iron; Outside painted Three Coats White Lead, with Top Strake painted Bright Red; Gunwales and Decks finished Natural; Inside painted Two Coats Green.

FAMILY ROW BOAT

Complete with One Pair of Varnished and Leathered Spruce Oars and Two Pairs of Oar Locks; These Boats are now provided with a Reinforced Transom extending high enough above the Stern Deck to allow for fastening any of the ordinary Outboard Motors.

+**No. 96—Length 16 ft., 48 in. Beam;** Depth Forward 26 in.; Depth Amidship 17½ in., Depth Aft 23 in.; Weight 225 Lbs. Each $63.00

Specifications—Entire Frame made of Selected White Oak; Planking is Clear Selected Cedar; Coaming and Gunwales are made of Oak; Deck is made of Cedar; all Fastenings are Galvanized Iron, Outside painted Three Coats Marine White, Top Strake painted Bright Red; Decks, Coaming and Gunwales finished Natural with Three Coats Marine Spar Varnish; Inside Painted Two Coats Green.

INDIAN GIRL, CANVAS COVERED CANOES

Open Gunwale Type; High Grade throughout; Ribs and Planking Clear Selected Cedar; Ribs spaced 4 in. Centers; Gunwales and Fenders made from Clear Selected Spruce; Decks, Thwarts and Seat Rails made from Clear Birch; Seats are Hand Caned; All Fastenings are Copper and Brass; Polished Brass Stem Bands; Outside is Canvas Covered, Enameled in Green; Decks, Gunwales and inside finished with three coats of Spar Varnish; **Complete with One Spruce Paddle.**

Each

+**No. 86—Length 16 ft.;** Beam 32 in., Depth Amidship 12 in., Depth at Ends 24 in.; Shipping Weight 95 Lbs. Each....$42.00

+**No. 88—Length 18 ft.;** Beam 34 in., Depth Amidship 12 in., Depth at Ends 24 in.; Shipping Weight 110 Lbs. Each... 52.00

DUCK BOATS

Ribs and Stems of Selected Oak; Planking ⅜ in. Cedar, Clinker Built; Bottom is ⅝ in. Thick and 23 in. Wide in Center; Coaming of Oak; Decks and Covering Boards of White Pine; Entire Boat is painted two coats **Dead Grass Color;** Fittings consist of one Removable Seat, one pair 6 ft. Ash Oars, one Paddle and one pair Oar Locks.

Each

+**No. 45—Length 12 ft.;** 32 in. Beam; Length of Cockpit 6½ ft.; Weight 85 Lbs. Each.....$30 00

+**No. 46—Length 14 ft.;** 36 in. Beam; Length of Cockpit 8½ ft.; Weight 95 Lbs. Each..... 35.00

+All Above, Not Carried in Stock, Sold for Direct Shipment from Eau Claire, Wis.

PLAYING CARDS

No. 606B

No. 606C

No. 606D

No. 606E

No. 606F

No. 606G

Per Doz. Packs

Congress—Gold Edges; Artistic Series of Backs, Narrow Model; Highly Enameled in Beautiful Rich Colors and Taking Designs; Especially well suited for Card Parties, Home and Social Play; Each Pack in a Slide Cover Box.....$6.00

Two Packs in Transparent Lid Cartons, Six Assorted to Each Half Dozen, Weight 4 Lbs. per Dozen

No. 808R—Rider

No 808E—Expert

No. 808F—Fan

No. 808S—Snowflake

Per Doz. Packs

Bicycle—Air Cushion Finish, Highly Enameled; Assorted Colors; Possess a Slip Finish, Dealing and Wearing Quality, Peculiar to Themselves; Each Pack in a Neat Tuck Case.....$4.00

One Dozen Packs in a Carton; Weight 3¼ Lbs. per Dozen

APOLLO, Base Ball Back

Per Doz. Packs

No. 33—Air Cushion Finish; Plain Edges, Printed in Red and Blue, Each Pack in a Handsome Tuck Case $3 00

RAMBLER, Hindoo Back

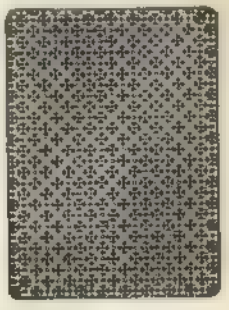
Per Doz. Packs

No 22 Enameled, Plain Edges, Printed in Red, Blue, Green and Brown; each Pack in a Tuck Case $3.00

PICKET, Octopus Back

Per Doz. Packs

No. 55—Hard Process Finish, Plain Edges, Assorted Colors, each Pack in a Tuck Case.....$2.75


STEAMBOAT, Bruce Back

Per Doz. Packs

No. 999—Medium Hard Finish, Plain Edges, Assorted Colors, One Pack in a Tuck Case..... $2.00

One Dozen in a Carton; Weight about 3¼ Lbs. per Dozen.

POKER CHIPS

Made of Composition; are Light, Noiseless and Easy to Handle. Uniform in Thickness; Finely Finished Edges: Unless Otherwise Ordered all are Packed 50 White, 25 Red and 25 Blue, in each Box of 100.

	Per 100
No. P1½—Plain, 1⅛ in. Diameter	$0.95
No. E1½—Engraved, 1⅛ in. Diameter	1.50

BARBED FENCE WIRE

We recommend the Galvanized for true economy; Painted wire eventually rusts out

DULUTH, 80 Rod Reels

Two Point, 14 Gauge Wire

Duluth Barbed Wire has the necessary tensile strength to resist all ordinary pressure, but will yield more quickly to extreme shocks than the heavier wires, thus lessening the chances of injury to stock. Flexible and just the thing for top or bottom wires of woven wire fencing, etc.

Per Reel

No. 014H—Galvanized Hog, Barbs 3 in. Apart..... $....

Weight about 50 Lbs. per Reel

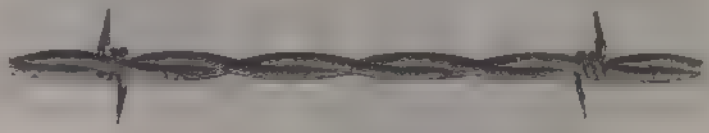
MINNEQUA SPECIAL; About 100 Lb. Spools

Two Point, 14 Gauge Wire; Not Twisted as closely as the Duluth

Per 100 Lbs.

No. 014M—Galvanized Hog, Barbs 3 in. Apart..... $ ...

Weight about 100 Lbs. per Reel; Equal to about one-half mile



GLIDDEN PATTERN, About 100 Lb. Reels

Two Point, 12 Gauge Wire

First Quality Selected Stock; has requisite tensile Strength to resist ordinary pressure, will yield quickly to extreme pressure

GALVANIZED

Per 100 Lbs.

No. 075C—Cattle, Barbs 5 in. Apart..... $....

No. 080H—Hog, Barbs 3 in. Apart..... ....

PAINTED

Per 100 Lbs.

No. 75C—Cattle, Barbs 5 in. Apart..... $....

No. 80H—Hog, Barbs 3 in. Apart..... ....

For rough estimate, Figure 1 Lb. Barbed Wire per Rod or 300 Lbs. of Cattle and 315 Lbs. of Hog Wire per Mile

Galvanized Advances 30 cents (Net) over Painted

MINNEQUA; About 100 Lb. Reels

Two Point, 13 Gauge Wire; Half Round Barbs

GALVANIZED

Per 100 Lbs.

No. 075M—Cattle, Barbs 5 in. Apart..... $....

No. 080M—Hog, Barbs 3 in. Apart..... ....

PAINTED

Per 100 Lbs

No. 75M—Cattle, Barbs 5 in. Apart..... $....

No. 80M—Hog, Barbs 3 in. Apart..... ....

About 100 Lbs. on a Spool

For rough estimate, Figure 1 Lb. Barbed Wire per Rod or 300 Lbs. of Cattle and 315 Lbs. of Hog Wire per Mile

Galvanized Advances 30 cents (Net) over Painted

CABLE FENCE WIRE

Two No. 12½ Twisted Strands, No Barbs, Weight about 7/8 Lbs. per Rod

Per Reel

No. 12½—Galvanized; 80 Rods on a Reel ..... $....

SMOOTH FENCE AND BALING WIRE

PLAIN ANNEALED FENCE

70 to 75 Lbs. per Coil

Wire Ga. Nos.	0	3	6	8	9	10	11	12	13
Ft. in 100 Lbs.	400	635	1020	1430	1705	2057	2512	3370	4478
Advance, 100 Lbs.		...	...	...	...	$0.05	.10	.15	.25

ANNEALED BALING

100 Lb. Bundles; Paper Wrapped

Wire Ga. Nos.	14	15	16
Ft. in 100 Lbs.	5860	7232	9600
Advance, 100 Lbs.	$0.50	.60	.70

GALVANIZED FENCE

70 to 75 Lbs. per Coil

Wire Ga. Nos.	4	6	8	9	10	11
Ft. in 100 Lbs.	738	1070	1429	1705	2057	2513
Advance, 100 Lbs.	$0.40	.40	.40	.40	45	50
Wire Ga. Nos.	12	13	14	15	16	18
Ft. in 100 Lbs.	3370	4478	5860	7232	9600	15600
Advance, 100 Lbs.	$0 55	.65	.75	1.15	1 25	1.95

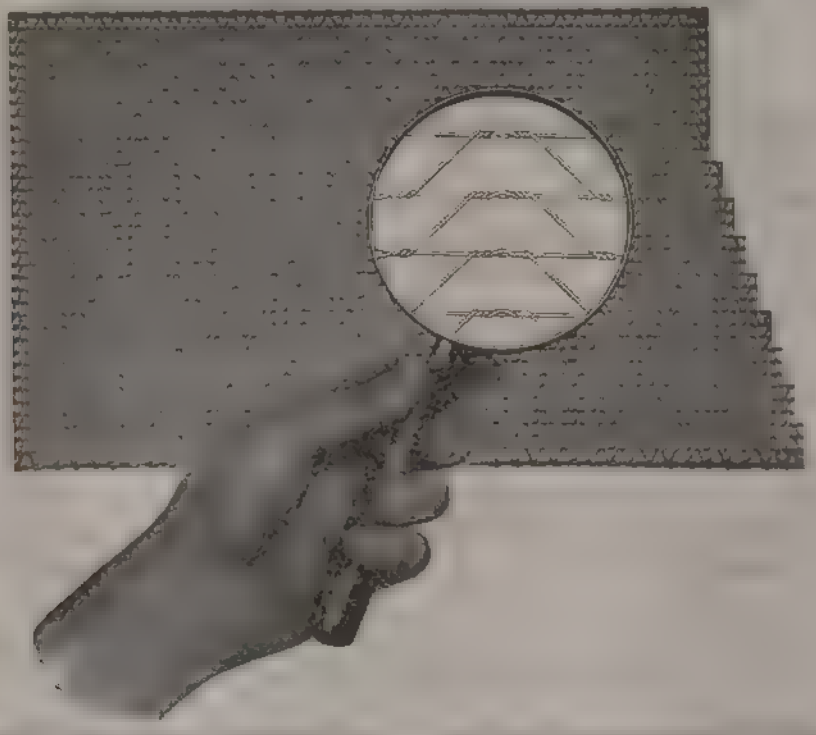
GALVANIZED COIL SPRING FENCE WIRE

9 or 10 Gauge, 150 Lb Bundles, Advance 10c per 100 Lbs. over 10 Ga. Galvanized Fence.

U. S. GALVANIZED POULTRY NETTING

Galvanized Before Weaving

A strictly "No-Sag" Poultry Netting, as the combination of Line and Mesh Wires, closely woven, prevents any lengthening or narrowing between posts. The Line Wires can be stretched to a high tension which makes the Fence rigid and upright without anchoring it to a baseboard or top rail



Half of the Wires are straight line wires which are interwoven with the mesh wires at their points of intersection with right and left twists. The cable margin wires are also connected with the mesh wires with right and left twists. In weaving all wires are under tension producing a fabric with all line wires the same length and all meshes or openings the same size. In stretching the tension is on the line wires thus preventing narrowing of fabric and loose baggy appearance.

2 IN. MESH; No. 19 WIRE

Per Square Foot, All Sizes											$0.02½
Width, In.	12	18	24	30	36	42	48	54	60	66	72
Square Ft. in a Roll	150	225	300	375	450	525	600	675	750	825	900
Weight per Roll, Lbs.	12½	17½	23	28	33½	38½	43	49	53	58	63
Per Roll of 150 Lin. Ft.	$3.75	5.62½	7.50	9.37½	11.25	13.12½	15.00	16.87½	18.75	20.62½	22.50

1 IN. Mesh; No. 19 Wire

Per Square Foot, All Sizes											$0.06½
Width, In.	12	18	24	30	36	42	48	54	60	66	72
Square Ft. in a Roll	150	225	300	375	450	525	600	675	750	825	900
Weight per Roll, Lbs.	20	29½	37½	45	53	62	71	78½	87½	97½	106½
Per Roll of 150 Lin. Ft.	$8.25	12.37½	16.50	20.62½	24.75	28.87½	33.00	37.12½	41.25	45.37½	49.50

150 Lineal Feet in a Roll. We do not cut Rolls

POULTRY NETTING STAPLES

¾ in. ⅞ in.

GALVANIZED, No. 14 Wire

Size	¾ in.	⅞ in.
Number in a Pound	480	416
	Per Pound	
1 Lb. Boxes	$	
5 Lb. Boxes	$	
100 Lb. Kegs	$	

BALE TIES

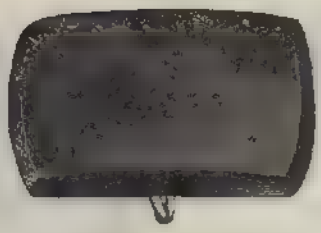
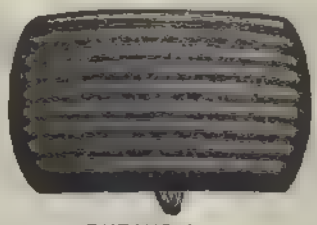
CROSS HEAD

Double Annealed Wire of Great Tensile Strength; Oiled Black Finish; Ends Wrapped.

Gauge of Wire	15	15
Length, Feet	9	9½
Weight, Bundle, Lbs.	3[illegible]	45½
Per Bundle	$5.18	5.42

250 Ties in a Bundle.

BRIDLE ROSETTES

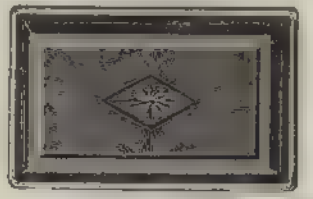



DURANOID

All Black; Made of a Composition specially adapted in strength and elasticity for the purpose; nicely polished and presents a fine appearance; Loop is firmly imbedded and will not come loose

No. 105—Size 1¾x1 in.; Plain Surface	Per Gross $6 00	No. 100—Size 1¾x1 in.; Fluted Surface	Per Gross $6 00	No. 99—Diam. 1½ in.	Per Gross $6 00
Weight 5 Lbs. per Gross		Weight 5 Lbs. per Gross		Weight 5 Lbs. per Gross	

Half Gross in a Box



GENUINE HARD RUBBER

All Black; particularly adapted to light work, durability is combined with neatness and fine finish; will not crack, soil nor tarnish; Wire Loop firmly fastened

Plain Rectangular	Per Dozen	Fancy Rectangular	Per Dozen	Plain Oval	Per Dozen	Fancy Round	Per Dozen
No. 58—Size 1⅝x1 in.	$2 00	No. 174—Size 1⅝x1 in.	$2 00	No. 160—Size 1¾x1 in.	$2.00	No. 150—Diam. 1⅝ in.	$2 00

Half Dozen on Display Card; Two Dozen in a Box; Weight ⅛ Lb. per Dozen

INITIAL BRIDLE ROSETTES

GENUINE RUBBER

Diameter 1¾ in.; Back unscrews and any Letter can be inserted; Glass Cover, Protected by Raised Rim; Wire Loop.

	Per Pair
No. 95—With Silver Letters	$0 80
No. 96—With Gilt Letters	80
No. 97—With Black Letters	80

Two Dozen in a Box; Weight 1 Lb. per Dozen

GLASS

Diameter 1¾ in.; Flat Face; Black Lettering, the Letter is transferred on the under surface of the Glass, and each one is uniform in size; Wire Loop.

	Per Doz. Pairs
No. 647—Silver Frosted Back	$1 50
No. 647G—Gilt Frosted Back	1.50

One Pair on a Card; 12 Cards in a Box
Weight 2 Lbs. per Box

HAIR BRIDLE ROSETTES, PLUMES AND TASSELS

Used for Decorative purposes on sides of Bridle

CORRUGATED ROSETTE, DROOPING PLUMES

	Per Pair
No. 20—Length 15 in.; Red Hair, Wavy Plume, XC Base	$0.88

One Pair in a Package
Weight 2 Lbs. per Dozen

CORRUGATED HAIR ROSETTES

	Per Pair
No. 31—Length 8 in.; Red Hair Plume; XC Base	$0.50

One pair in a Package
Weight 1¼ Lbs. per Dozen

12 to 18 in. may also be hung from a Center Ring, where Cross Reins pass.

PLUMES OR TASSELS

No. 32—Wavy Red Hair, Nickel Plated Ferrule; Wire Loop

Length, In.	8	10	12	15	18
Wt., Doz. Lbs.	1⅛	1½	1¾	2	2½
Per Pair	$0.30	.36	.42	.50	.60

HARNESS ORNAMENTS

STAMPED STAR AND SHIELD ORNAMENT

Heavy Metal, Solid Smooth, filled, with Three Round Brass Wire Fast-

No. 1750—Brass
No. 1752—Nickel on Brass

Size, In	1½	2	2½
Wt Gross, Lbs.	3½	5	9
Per Dozen	$0.92	1 04	1.20

STAMPED STAR AND RING ORNAMENT

Heavy Solid, slightly convexed Surface, with Four Flat Brass Fasteners securely Braced.

No. 1760—Brass
No. 1762—Nickel on Brass

Size, In	1½	2	2½
Wt Gross, Lbs.	3	5	7
Per Dozen	$0.82	.94	1.24

STAMPED RINGS

Heavy Solid Metal, slightly Oval Surface with Four Flat Fasteners securely Brazed; suitable for enclosing Metal Letters, Monograms, etc.

No. 2200—Brass
No. 2202—Nickel on Brass

Size, In	1½	2	2½
Wt. Gross, Lbs.	1	2½	3
Per Dozen	$0.66	.76	.88

HEART ORNAMENT

Solid Smooth, filled with Four Round Brass Fasteners.

No. 1800—Brass
No. 1802—Nickel on Brass

Size, In	1⅜	2½
Wt Gross, Lbs	10	24
Per Dozen	$0.90	1.40

COLONIAL OVAL FACE LETTERS

Adapted for all Kinds of Strap Work, Hame Housings and Winkers

No. 702—Nickel on Brass; No. 700—Solid Brass

Size, In.	⅝	1	1½
Weight per Dozen, Lbs.	⅛	¼	½
Per Dozen	$1.00	1.25	2.50

One Dozen in a Box

SOLID METAL BLOCK LETTERS

Cut Showing Full Size of ¾ in. Letters

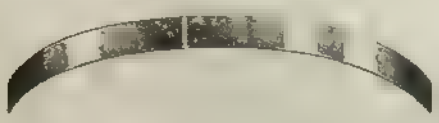
No. 1702, Nickel on Brass, No. 1700, Solid Brass

Adapted for all Kinds of Strap Work, Hame Housings and Winkers

Size, In.	¾	1	1¼	1½	2	2½	3
Weight per Dozen, Lbs	⅛	⅛	⅛	⅛	¼	¼	½
Per Dozen	$0.75	.75	.82	1.08	1.74	2.25	2.82

1, 1¼, 1½ and 2 in. Sizes Carried in Stock; the ¾, 2½ and 3 in. Sizes, Furnished promptly from Factory

One Dozen of a Kind in a Box



BAND BRIDLE FRONT PLATES

Good Heavy Metal; Complete with Rivets; Two ⅛ in. Holes in Each End

PLAIN
No. 1501—Nickel on Brass
No. 1500—Solid Brass

Width, In	⅝	¾	⅞	1
Length, In	12	13	13	13
Weight Dozen, Lbs	⅛	⅛	⅛	⅛
Per Dozen	$0.70	.72	.78	.82

FANCY
No. 1822—Nickel on Brass

Width, In	⅝	¾	⅞
Length, In	12	13	13
Weight Dozen, Lbs	⅛	⅛	⅛
Per Dozen	$0.90	.94	1.00

One Dozen in a Package

SINGLE HOUSING PLATES

Length 6¼ in.; 24 Gauge Metal; used on Hame Housings; Pierced either for Nails or Rivets; 4 Plates in a Set, Two Rights and Two Lefts.

	Per Doz. Sets of 4
No. 199—Nickel on Brass	$6 50
No. 198—Solid Brass	6 50

One Dozen Sets in a Box with Rivets
Weight 2½ Lbs. per Dozen Sets

BUCKLE SHIELDS

For Decorative Purposes; also prevents Horse's Hair from Catching in the Buckle

SPOT CENTER, FLEXIBLE

Extra Heavy; with Deep Bowl which completely covers Buckle; Adjustable to any thickness of Strap.

No. 116N—Nickel on Composition
No. 116B—Solid Brass

Size, In	⅞	1	1⅛	1¼	1½
Wt. Gross, Lbs	4½	5½	6½	8	10
Per Gross	$5.90	7.60	9.20	10.80	15.10

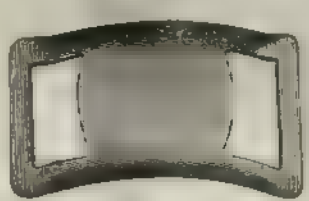
FLEXIBLE

The Hinged Loops admit of its being easily adjusted to any Thickness of Strap.

No. 114N—Nickel on Composition
No. 114B—Solid Brass

Size, In	⅞	1	1⅛	1¼	1½
Wt. Gross, Lbs.	4½	6½	6½	8	10
Per Gross	$5.90	7.60	9.20	10.80	15.10

Half Gross in a Box



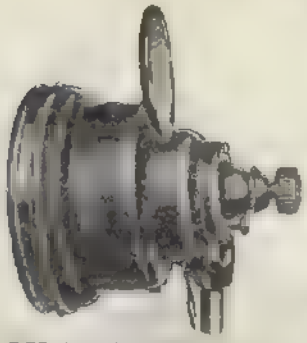
MOSSMAN PATENT

No. 32N—Nickel on Composition

No. 32B—Solid Brass

Size, In	⅝	¾	⅞	1	1⅛	1¼
Wt., Gross	3	4	5	6	6½	8
Per Gross	$4.00	4.20	5.10	6.50	7.90	9.30

ELECTRIC SPOT LIGHTS



RED SPOT SEARCHLIGHTS

A Combination White Spotlight and Red Danger Signal; By pushing a Button the light is instantly changed from an intense white light to a brilliant red; Each furnished with a 6-7 Volt, 15 Candle Power Lamp, 6 ft. of Duplex Cable, Copper Terminals, Focusing Device and Switch in rear for opening and closing circuit

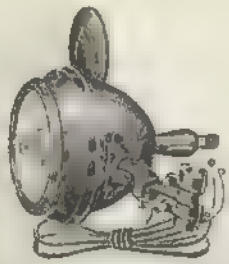
Each

No. 1613—With Universal Windshield Bracket; Diam. 5½ in.; Black Enameled Finish, Silvered Parabolic Reflector . $6 50

No. 1614 With Windshield Bracket, for Series 17 Studebaker and Reo Cars, otherwise same as above..... . 6 50

No. 1618—With Mirror, otherwise same as No. 1613. . 6 1

One in a Box; Weight 2¾ Lbs. Each



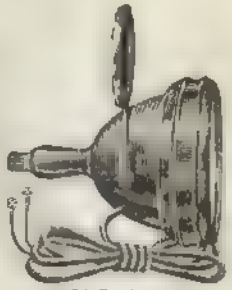
OLD SOL NITROJECTORS

A perfect Windshield Spot Light which complies with all laws for No-Glare Lighting Devices; It curves with the road and you can see anywhere around you, or for hundreds of feet ahead; It is within easy reach of the hand and can be used to locate litches, etc., making it safe to pass another Car; Focusing Device at rear of Handle

Each

No. 100—Torpedo Design; Black Enameled, 8 in Body; Double Light Control; 4 in. Adjustable Diminishing Mirrorscope; a Double Cylinder Shutter Controls the height of the light; Universal Joint; Twin Bracket, Adjustable to any Straight or Tapered Wind Shield; Complete with 5 ft. of Duplex Cable.....$10.00

Weight 7 Lbs. Each



OLD SOL

Each

No. 77 Black Enameled, 6 in. Door and Body; 3 in. Mirror on Lamp; Focusing Device at Rear of Handle, Integral with Switch; 6 Volt, 15 Candle Power Bulb, and 6 ft. of Cable, with Copper Terminals; for all Cars, except Reo and Studebaker Series 17.....$5 00

Weight 3 Lbs. Each

No. 70—With Pilot Light and Searchlight Bulbs, and both operated by one Switch in Handle of Lamp; Has 7 in. Door and Body; 3 in. Diminishing Mirror and Focusing Device, Integral with Handle; 6 Volt, 15 Candle Power Searchlight, and 6 Volt, 2 Candle Power Pilot Light Bulbs; 8 ft. Duplex Cable, with Terminals; for Studebaker Series 17, and Reo Wind Shield Only.....$7 00

Weight 5 Lbs. Each

No. 51—WARNER LENZ

Fits any Motor Lamp; No Dimmer is necessary, gives light enough everywhere and nowhere too much; the illustration shows the rows of small Lenses in the front; On the back are similar rows which overlap so that every bit of light coming from the Lamp is diffused in a spray which covers almost 180 degrees—with a greater force in front where it is needed, and a general reduction of intensity toward the sides, Not a bit of light is lost.

Diam., In.	8	8¼	8½	8¾	9
Per Pair	$3.50	3.50	3 50	3.50	3 50
Diam., In.	9¼	9½	10	10¼	10½
Per Pair	$4 00	4.00	4 00	5.00	5 00

One Pair in a Box, Average Weight 1 Lb. per Pair

No. 61—CORNING CONAPHORE

The man behind the Corning Conaphore can see 500 feet ahead. His light does not strike down directly in front of the car, nor upward, blinding approaching motorists, but shoots out in a long, intense beam, never more than 42 in. from the ground, with plenty of side light. The Noviol Beam lights the road efficiently even under adverse weather conditions.

The orange colored Rays penetrate fog and dust instead of being reflected back to glare your eyes as an ordinary white light does. Easily installed by simply removing present glass and inserting Conaphore; Sizes made to fit all cars

Diam., In.	8	8⅛	8¼	8⅜	8½	8¾	9
Per Pair	$3 50	3.50	3.50	3 50	3.50	4.50	4.50
Diam., In.	9¼	9½	9¾	10	10⅛	10¼	10½
Per Pair	$4 50	4.50	4.50	4.50	5 00	6 00	6.00

One Pair in a Box, Average Weight 1 Lb. per Pair

LENS AND GLASSES

FRENCH OR BENT GLASS MIRRORS

Nos.	4FM	4½FM	5FM	5½FM
Diam., In.	4	4½	5	5½
Each	$0.40	.45	.50	.55
Nos.	6FM	6½FM	7FM	
Diam., In.	6	6½	7	
Each	$0.60	.65	.70	

Open Stock; Average Weight 8 Oz. Each

MANGIN MIRROR LENSES

For Auto Lamps

Nos.	4M	5M	5½M
Diam., In.	4	5	5½
Each	$0 90	1 00	1 25
Nos.	6M	6½M	7M	8M
Diam., In.	6	6½	7	8
Each	$1.50	1.75	2.25	3.25

One in Box; Average Weight 1¾ Lbs. Each

CONVEX FRONT GLASSES

Double Strength

Nos.	8⅛C	8¼C	8½C
Diam., In.	8⅛	8¼	8½
Each	$0 45	50	55
Nos.	8¾C	9C	9¼C
Diam., In.	8¾	9	9¼
Each	$0 60	80	80
Nos.	9⅜C	9½C	9⅝C
Diam., In.	9⅜	9½	9⅝
Each	$0 65	.70	.70

FLAT FRONT GLASSES, ⅛ In.

Nos.	8F	8½F	9F	9½F	10F
Diam., In.	8	8¼	9	9½	10
Each	$0 28	.30	.33	.35	.38

Open Stock; Average Weight 8 Oz. Each

SEMAPHORE LENSES

For Side and Tail Lamps

White

Nos.	2½W	3W	3⅛W
Diam. In.	2½	3	3⅛
Each	$0.15	.16	.17
Nos.	3½W	3⅜W	3¾W
Diam., In	3½	3⅝	3¾
Each	$0.18	.19	.20

Red

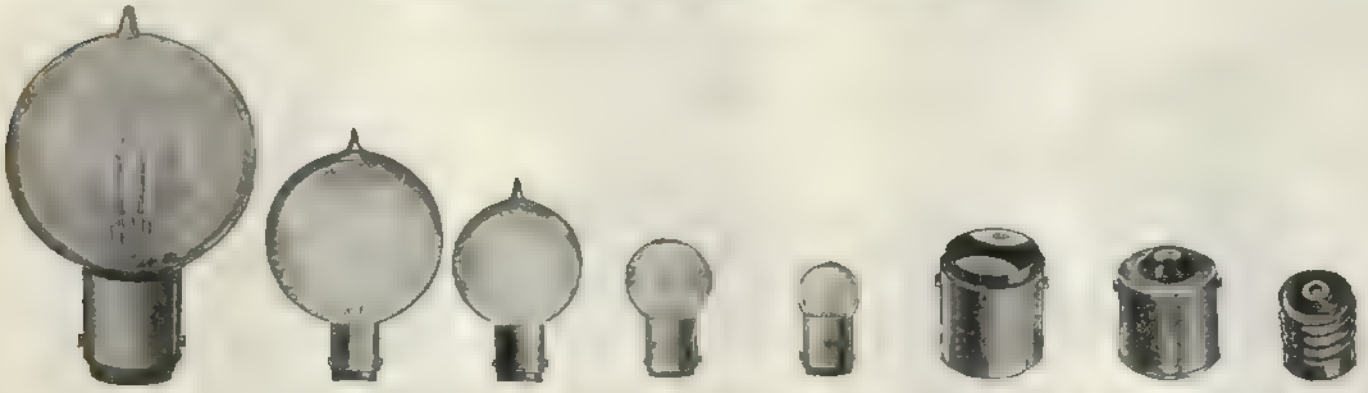
Nos.	2½R	3R	3⅛R
Diam., In	2½	3	3⅛
Each	$0 18	.19	.20
Nos.	3½R	3⅝R	3¾R
Diam., In	3½	3⅝	3¾
Each	$0 21	.22	.24

PLAIN WHITE LENSES

Nos.	2P	2¼P	2⅜P
Diam., In.	3	2¼	2⅜
Each	$0 13	.14	15
Nos.	3⅛P	3¼P	3⅜P
Diam., In	3⅛	3¼	3⅜
Each	$0 16	.17	18

Open Stock; Average Weight 8 Oz. Each

AUTOMOBILE MAZDA LAMPS



Type C Nitrogen Bulb | Style G18½ Bulb Diam. 2⅛ in. Length Over-all 3⅛ in. | Style G12 Bulb Diam. 1⅛ in. Length Over-all 2⅛ in. | Style G8 Bulb Side Light Diam. 1 in. Length Over-all 1⅞ in. | Style G5 Bulb Rear Light Diam. ¾ in. Length Over-all 1½ in. | Style No. 1001 Bayonet Candelabra Base (Double Contact) | Style No. 1101 Bayonet Candelabra Base (Single Contact) | Style No. 500 Candelabra Screw Base

We carry in Stock all Lamps as listed below; Can also supply any Lamps as listed, with Candelabra Screw Base, Style No 500, for Direct Shipment

TYPE "B" MAZDA AUTOMOBILE LAMPS

	Ediswan Double Contact Style No 1001 Nos.	Ediswan Single Contact Style No. 1101 Nos.	Candelabra Base Style No. 500 Nos.	Approximate Candle Power	Volts	Type and Size Bulbs	Diam. Bulbs, In.	Maximum Length Over-all In.	Amperes	Unit Package Quantity	Each
Rear and Speedometer	032	0473	027	2	3-4	G6	¾	1⅞	.84	10	$0.21
Rear and Speedometer	031	0481	032	2	6-8	G6	¾	1½	.42	10	.21
Side	057	051	056	4	6-8	G8	1	⅞	.84	10	.21
Side	0107	0101	0106	6	6-8	G10	1¼	2¼	1.25	10	.24
Headlight	0149	0151	0148	12	6-8	G12	1½	2½	2.0	5	.27
Headlight	0157	0139	...	15	6-8	G12	1½	2½	2.0	5	.27
Headlight	0190	0189	...	15	6-8	G16½	2⅛	3⅛	1.5	5	.27
Headlight	0241	0242	...	18	6-8	G16½	2⅛	3⅛	2.0	5	.27
Headlight	0243	0246	...	21	6-8	G16½	2⅛	3⅛	1.5	5	.30
Headlight, Ford Special	0285	...	...	18	9	G16½	2⅛	3⅛	2.0	5	.27
Headlight	0296	0297	...	15	12-16	G16½	2⅛	3⅛	1.0	5	.30
Rear	0490	0491	...	2	12-16	G6	¾	1⅞	.26	10	.24
Side	070	071	...	4	12-16	G8	1	1⅞	.42	10	.24
Headlight	0570	0571	...	18	12-16	G16½	2⅛	3⅛	1.25	5	.30
Rear	0506	...	...	2	18-24	G6	¾	1⅞	.13	10	.35
Side	097	...	...	4	18-24	G8	1	1⅞	.26	10	.40
Headlight	0580	...	...	21	18-24	G16½	2⅛	3⅛	1.0	5	.50
Rear and Speedometer	0483	...	...	2	10	G6	¾	1⅞	.26	10	.28

TYPE "C" NITROGEN AUTOMOBILE HEADLIGHT LAMPS

Headlight	02100	02101	...	12	6-8	G8	1	1⅞	1.5	10	$0.40
Headlight	02300	02301	...	21	6-8	G12	1½	2½	2.5	5	.35
Headlight	02302	02303	...	24	6-8	G12	1½	2½	3.0	5	.50
Headlight	02400	02401	...	36	6-8	G16½	2⅛	3⅛	4.0	5	.75
Headlight	02306	...	...	24	18-24	G12	1½	2½	1.0	5	.75
Headlight, 2 in. Series, Ford	02307	...	...	21	9	G12	1½	2½	3.0	5	.35
Headlight	02304	02305	...	24	12-16	G12	1½	2½	1.5	5	.37
Headlight	02402	02403	...	40	12 16	G16½	2⅛	3⅛	2.0	5	.75

List Price on Type "C" Lamps. Higher Candle Power, will be furnished on application

AUTOMOBILE LAMP BOXES

For carrying an Extra Set of Automobile Lamps; Will hold Six Bayonet Base Lamps; Bulbs held securely in an upright position by spring pressure

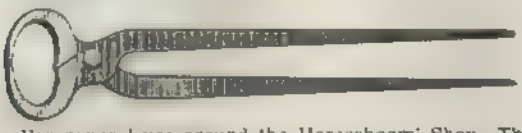
	Each
No. 75—Heavy Sheet Iron; Size 6½x3⅝x3⅝ in.; Black Finish	$ 2.00

One in a Carton; Weight 1 Lb. Each

FARRIERS' TOOLS

The Champion line is by far the best line of Farriers Tools on the market, price considered. The best sellers are the No. 49 and No. 48 in the 12 in. sizes. These two Nippers in particular should be stocked by every Hardware Merchant. No. 31 represents the best Blacksmiths' Tongs, 12 in. is the best seller. In the Northwest, Wagner & Lowe Nippers are favorites with practically all Horseshoers. The Round End Nail Clincher is the best seller of these we list

FARRIERS' PINCERS



For general use around the Horseshoers' Shop, Thin Jaws for removing shoes, Handles Black Oil Finish; Jaws Polished

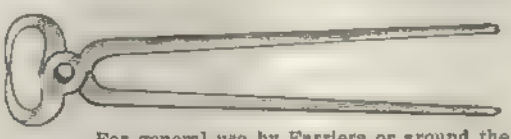
HELLER

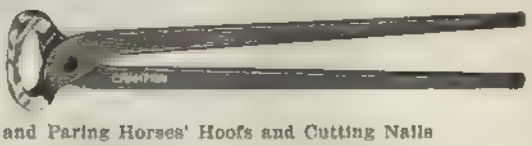
Nos.	21	20
Length, In.	12	14
Weight per Dozen, Lbs.	23	33
Per Dozen	$18 00	24.00

No. 49—CHAMPION

Length, In.	12	14
Weight per Dozen, Lbs.	22	23
Per Dozen	$10.00	12.00

HOOF PARING OR NAIL CUTTING NIPPERS





For general use by Farriers or around the Farm, for Cutting and Paring Horses' Hoofs and Cutting Nails

HELLER, FULL POLISHED

Nos.	24B	24A	24
Length, In.	10	12	14
Weight per Dozen, Lbs.	12¾	20	28
Per Dozen	$19.20	24.00	28.80

No. 48—CHAMPION, OIL FINISH, POLISHED JAWS

Length, In.	10	12	14
Weight per Dozen, Lbs.	14	26	29
Per Dozen	$22.00	24.00	26.00

HOOF PARING NIPPERS

Made especially for Trimming and Paring the Hoofs of Horses and Cows

HELLER, FULL POLISHED

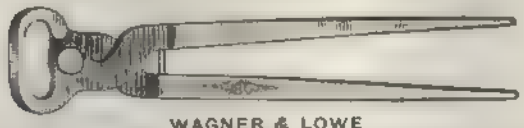
Nos.	23A	23
Length, In.	12	14
Weight per Dozen, Lbs.	21	30
Per Dozen	$24 00	28 80

No. 100—CHAMPION, OIL FINISH, POLISHED JAWS

Length, In.	12	14
Weight per Dozen, Lbs.	23	25
Per Dozen	$24 00	28.80

All Above, Half Dozen in a Box

HOOF AND NAIL NIPPERS



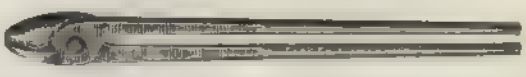
WAGNER & LOWE

These Nippers are time and labor savers; They do quicker and better work; Light weight; Great Leverage and Wide Opening are big advantages; Full Polished.

Nos.	1	2
Length, In.	14½	16½
Weight per Dozen, Lbs.	24	36
Per Dozen	$25 00	33 00

Half Dozen in a Box

BLACKSMITH TONGS



No. 31—HORSESHOERS' OR FARRIERS' FORGING

Heavy Pattern; Drop Forged, Solid Steel, Oil Finish; Designed especially for use in Forging Horse Shoes

Length, In.	12	14
Weight per Dozen, Lbs.	19½	21
Per Dozen	$6 00	6.00

Open Stock

NAIL CLINCHERS

CHAMPION

Especially used in Clinching Nails on Colts or Nervous Horses; Solid Cast Steel, Full Polished

ROUND END

Adapted to any Angle of the Foot

No.	30
Length, In.	14
Weight per Dozen, Lbs.	22
Per Dozen	$26 40

Half Dozen in a Box

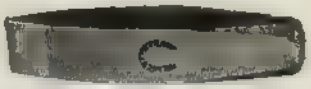
STRAIGHT END

No.	29
Length, In.	14
Weight per Dozen, Lbs.	22
Per Dozen	$26.40

Half Dozen in a Box

BLACKSMITH TOOLS

Atha Tool Co.



Used for Cutting Bar Iron of any Shape; Made of Best Grade of Crucible Tool Steel, Oil Finished, Hardened Bit; Eye for Handle

HOT CHISELS

Width of Bit, In.	1¼	1⅜	1½	1¾
Weight Each, Lbs.	1⅞	2⅜	2⅞	4⅛

Per Pound, All Sizes.....$0.40

COLD EYE-CHISELS

Width of Bit, In.	1¼	1⅜	1½
Weight Each, Lbs.	2	2½	3

Per Pound, All Sizes.....$0.40

HARDIES

Best Tool Steel, Oil Finish; Set in Anvil Hole, to Cut Hot Iron or Steel

Shank, In.	½	⅝	¾	⅞
Bit, In.	1⅛	1⅜	1⅝	2
Weight Each, Lbs.	½	¾	1	1⅛

Per Pound, All Sizes.....$0.40

Shank, In.	1	1⅛	1¼	1½
Bit, In.	2¼	2⅜	2½	2¾
Weight Each, Lbs.	1⅝	2	2⅛	3

Per Pound, All Sizes.....$0.40

Used for Forging Round Work; Tool Steel, Oil Finish

TOP SWAGES

Used with Handle

Groove, In.	¼	⅜	½	⅝	¾	⅞	1
Wt. Each, Lbs.	2	2¼	2¼	2½	2⅝	2⅝	2¾

Per Pound, All Sizes.....$0.40

Groove, In.	1⅛	1¼	1⅜	1½	1¾	2	2½	3
Wt. Ea., Lbs.	2⅞	3	3¼	3½	4	4¼	4⅛	5½

Per Pound, All Sizes.....$0.40

BOTTOM SWAGES

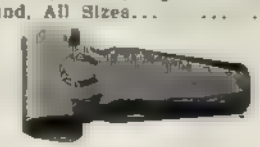
With 1 In. Shank, Sets in Anvil Hole

Groove, In.	¼	⅜	½	⅝	¾	⅞	1
Wt. Each, Lbs.	1⅝	2	2	2¼	2½	2½	2½

Per Pound, All Sizes.....$0.40

Groove, In.	1⅛	1¼	1⅜	1½	1¾	2	2½	3
Wt. Ea., Lbs.	2⅝	3⅛	3⅝	3⅝	5	5¼	5¼	6½

Per Pound, All Sizes.....$0.40



TOP FULLERS

Best Tool Steel, Oil Finish
Used to Forge Work that is to be Grooved; Measured across Face
Top Fuller is used with Handle

Size, In.	¼	⅜	½	⅝	¾	⅞	1
Wt. Each, Lbs.	2	2¼	2¼	2½	2⅝	2⅝	2⅞

Per Pound, All Sizes.....$0.40

Size, In.	1⅛	1¼	1⅜	1½	1¾	2	2½	3
Wt. Each, Lbs.	2	3	3¼	3½	4¼	5	6½	7

Per Pound, All Sizes.....$0.40

BOTTOM FULLERS

Best Tool Steel, Oil Finish
Used to Forge Work that is to be Grooved; Measured across Face
Bottom Fuller Sets in hole in Anvil; 1 In. Shank

Size, In.	¼	⅜	½	⅝	¾	⅞	1
Wt. Each, Lbs.	2	2½	2½	2¾	3	3½	3

Per Pound, All Sizes.....$0.40

Size, In.	1⅛	1¼	1⅜	1½	1¾	2	2½	3
Wt. Ea., Lbs.	3	3½	3⅝	3⅝	3½	4½	5½	6½

Per Pound, All Sizes.....$0.40

FLATTERS

Used with Handle, to Forge Flat Surfaces; Best Tool Steel, Oil Finish Hardened Face

Square Face, In.	2	2½	3	3½	4
Wt. Each, Lbs.	2	2½	4½	7	7½

Per Pound, All Sizes.....$0.40

SET HAMMERS

Can be used close to corner; Best Tool Steel, Oil Finish Hardened Face

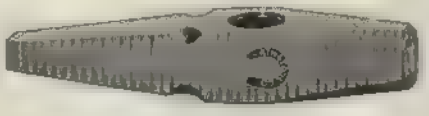
Square Face, In.	1¼	1⅜	1½	1¾	2
Wt. Each, Lbs.	1½	2	2½	3½	3¾

Per Pound, All Sizes.....$0.40

ROUND B. S. PUNCHES

Diam. Punch, In.	¼	⅜	½	⅝	¾	1
Wt. Each, Lbs.	1⅝	1¾	1⅞	2	2	2½	3½

Per Pound, All Sizes.....$0.40

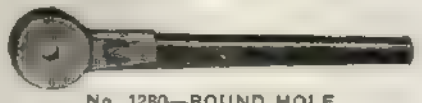


SQUARE B. S. PUNCHES

Diam. Punch, In.	¼	⅜	½	⅝	¾	1
Wt. Each, Lbs.	1⅝	1¾	1⅞	2	2	2½	3½

Per Pound, All Sizes.....$0.40

BLACKSMITHS' HEADERS



No. 1280—ROUND HOLE

Highest Quality Solid Cast Steel; Oil Finish, Used to Slip over Bar of Iron or Steel while Head is being Forged; Measurement given is Size of Holes

Size, In.	¼	⅜	½	⅝	¾	⅞
Weight, Each.	2⅝	2¾	2¾	2¾	2¾	3

Size, In.	⅝	¾	⅞	1	1¼
Weight, Lbs.	4	4	4½	4½	4½

Per Pound, All Sizes.....$0.40

STUMP PULLERS AND GRUBBERS

FAULTLESS

Pulley

The only Stump Puller that **Winds the Cable Down**, instead of Up, on the drum the Cable being always low down on the drum is never too high for horse, to ele over, and gives a direct draft from the anchor stump to the one being pulled, affecting a saving of time and power, the **Black** is taken up by hand many times per hour than it could be moved by horse power, the material is of the best available for the purpose and strong enough to stand all that any team can pull the **Drum** is large enough to wind the cable rapidly. It is built on one substantial hardwood bed which the drum and Shaft on which it revolves, being supported by a malleable iron bed casting, **Shaft** extends down through bed casting and lower end of steel anchor bar, where it is held firmly by a strong steel key, and cannot give way under the most severe strains, **Sweep** is of straight grained hardwood, bolted to casting and is always the same distance from ground, the best grade of malleable Iron and Steel is used in the construction of the machine, insuring great strength and long service

A Special Catalog, fully describing and giving instructions for working the Faultless Stump Puller and Grubber, will be mailed upon application

ONE HORSE

	*Each
No. 1—Diameter Drum 11 in., Length Sweep 12 Feet, giving 52 horse power with One Horse and Pulley; complete with 80 Feet ⅝ in. Faultless Steel Cable, One 5 Foot Anchor Cable, ⅝ in., One Stump Snare One Double Power Pulley, Sweep, Lead Pole and Brace, Rope Hooks, Clamps, etc., and One Root Plow; for description of Snare, Pulley and Plow, see below; Weight 950 Lbs. Complete	$220 00
Without Snare, Pulley and Plow; otherwise same as above, Weight 865 Lbs. Each	165.50

TWO HORSE

	Each
No. 2—Diameter Drum 13½ in., Length Sweep 12 Feet, giving 85 horse power with Two Horses and One Pulley; Complete with 100 Feet ¾ in. Faultless Steel Cable, One Ten Foot Anchor Cable, ⅝ in., One Stump Snare One Double Power Pulley, Sweep, Lead Pole and Brace, Rope Hooks, Clamps, etc., and One Root Plow for description of Snare, Pulley and Plow, see below Weight 1,250 Lbs.	$270 00
Without Snare, Pulley and Plow; otherwise same as above; Weight 1,142 Lbs. Each	200 50

STUMP SNARES

For Hitching around Stump to save Long Cable, Complete with 10 Feet of Faultless Steel Wire Cable, Link Ring, Sleeve Casting, Clamps and Thimbles; made up ready for use

	*Each
No. 1S—With ⅝ in. Cable; Weight 25 Lbs. Each	$10 50
No. 2S—With ¾ in. Cable; Weight 28 Lbs. Each	12 50

DOUBLE POWER PULLEYS

By attaching the Hook in end of Pulley Cable, to a tree or stump and running the long Cable through Pulley, at an Angle to Stump to be Pulled, the Power of Machine is Doubled

Malleable Iron and Steel, Complete with 10 Feet of Faultless Steel Wire Cable, Rope Hook, Clamp and Thimble, made up ready for use

	*Each
No. 1P—With ⅞ in. Cable; Breaking Strain 74,000 Lbs.; Weight 60 Lbs. Each	$24 00
No. 2P—With 1 in. Cable, Breaking Strain 96,000 Lbs.; Weight 80 Lbs. Each	28 00

ROOT PLOWS OR STUMP HOOKS

For Pulling Out Stools, Rotten or Green Stumps that have been cut too low to fasten a Snare around, Solid Cast Steel and will not break nor wear out, indispensable in breaking up new ground or cut-over land; Handles make it easily guided or carried without stooping.

	*Each
No. 55—With Heavy Pulling Link, Tubular Steel Handles and Steel Braces; Weight 55 Lbs. Each	$20.00

Not Carried in Stock, Shipped Promptly from Factory in Iowa

SMITH

Winds the rope down low; can be set up and anchored ready for work in five minutes; works equally well on hill side or on rough or level ground; the Drum is V Shaped and winds the coils of rope over each other, reducing wear. Warranted free from all defects; to stand the strain and do the work claimed for it and is sold under a positive guarantee to give satisfaction.

Outfit consists of the Complete Machine ready for use except the Crosspole and Sweep, these being cut in the timber where machine is used.

OLD STYLE SMITH

F. O. B. LaCrescent, Minn.

	*Each
No. 1D—For Hand or One Horse on an 8 ft. Sweep, with 6 ft. Anchor Loop, 25 ft. of ½ in. Steel Pull Rope, for Brush and Trees up to 4 in.; Weight 175 Lbs.	$35 00
No. 2D—For One or Two Horses on a 10 ft. Sweep, with 6 ft. Anchor Loop, 40 ft. of ⅝ in. Steel Pull Rope; for 8 in. Stumps; Weight 225 Lbs.	50.00
No. 3D—For One or Two Horses on a 12 ft. Sweep, with 6 ft. Anchor Loop, 50 ft. of ¾ in. Steel Pull Rope; for 18 in. Stumps; Weight 350 Lbs.	70 00
No. 4D—For One or Two Horses on a 14 ft. Sweep, with 6 ft. Anchor Loop, 75 ft. of ⅞ in. Steel Pull Rope; for 24 in. Stumps; Weight 425 Lbs.	100.00
No. 11—For One or Two Horses on a 16 ft. Sweep, with 12 ft. Anchor Loop, 75 ft. of ⅞ in. Steel Pull Rope; for 48 in. Stumps; Weight 550 Lbs.	135.00

NEW SMITH

For One or Two Horses

F. O. B. LaCrescent, Minn. *Each

No. 2N—Complete with 6 ft. ¾ in. Anchor Loop, 50 ft. ⅝ in. Pull Rope, and Snatch Block with 8 ft. ¾ in. Hitch Rope, and Take-up for Slack Rope; Guaranteed Breaking Strain, 20 Tons. $100 00

Shipping Weight 325 Lbs. Each

No. 3N—Complete with Patent 25 ft. ¾ in. Anchor Rope, 75 ft. ⅝ in. Pull Rope and Snatch Block with 10 ft. ¾ in. Hitch Rope, and Take-up for Slack Rope, Guaranteed Breaking Strain 32 Tons 150 00

Shipping Weight 500 Lbs. Each

No. 4N—Complete with Patent 25 ft. ⅞ in. Anchor Rope, 75 ft. ¾ in. Pull Rope, Snatch Block with 15 ft. ⅞ in. Hitch Rope, and Take-up for Slack Rope; Guaranteed Breaking Strain, 44 Tons. 200 00

Shipping Weight 650 Lbs. Each

No. 11N—Complete with Patent 35 ft. 1 in. Anchor Rope, 75 ft. ⅞ in. Pull Rope, Patent Snatch Block with 15 ft. 1 in. Hitch Rope and Take-up for Slack Rope, Guaranteed Breaking Strain, 60 Tons 250 00

Shipping Weight 850 Lbs. Each

RAILROAD AND GRADING PLOWS

RAILROAD PLOWS

DORSCH, EIGHT OR TEN HORSE PLOWS

On a Straight Pull, 20 Horses cannot break this Plow

	Each
No. 4—Plow, 11 in. Cut; Weight 285 Lbs.	$55 00
Extra Steel Moldboards; Weight 25 Lbs.	7 00
Extra Cast Iron Landsides; Weight 10 Lbs.	3 00
Forged Steel Shares; Weight 15 Lbs.	7.00

The Share is made of heavy selected Plow Steel, Double Shinned with a Point that has every requisite for wear, is easily welded and sharpened again after becoming dull, by an ordinary blacksmith. No other maker of Plows uses such a heavy quality of steel in the Points, and none have the durability.

Beam is made of steel, of graceful shape, with wide flanges on the top and bottom, from about the top of moldboard to clevis point. Share and Moldboard are of the heaviest and best quality of steel, carefully forged and tempered. Heavy Cast Iron Landside, Oak Handles, plate [illegible] on Moldboard side. Adjustable Gauge Shoe Furnished in preference to wheel.

DORSCH, FOUR HORSE PLOWS

	Each
No. 2—Plow, 9 in. Cut; Weight 175 Lbs.	$40.00
Extra Steel Moldboards; Weight 20 Lbs.	6.00
Extra Cast Iron Landsides; Weight 8 Lbs.	3.00
Forged Steel Shares; Weight 10 Lbs.	6.00

Heavy Selected Plow Steel Share, Double Shinned, easily welded and sharpened; heavy steel Beam with Wide Flanges.

The Handles are made of Oak, 1¾x3 in.; the Moldboard Handle is heavily plated with steel from the bottom to the end of the handle, to prevent wearing when the Plow is turned on the side. Handles braced to the Beam with 1 in. Wrought Pipe, heavy Gauge Wheel, hand forged Clevis

K AND J, SIX TO EIGHT HORSE PLOWS

This Plow is built to withstand the roughest conditions ever encountered in Contractor Work

The Share and Moldboard are best Plow Steel; the Landside and Point are double shinned; the Beam is Selected Hardwood, heavily ironed from Clevis to Standard; Reversible Cutters; Extra Strong Clevis with two Rings; Malleable Iron Hand Holds.

	Each
No. 101—With 8 ft. Beam 12 in. cut Weight 228 Lbs. Each	$50 00
Extra Landside Points; Weight 40 Lbs. Each	12 00

K AND J, FOUR TO SIX HORSE PLOWS

Built Similar to the No. 101, but not intended for such Heavy Work

The Share and Moldboard are best Plow Steel; the Landside and Point are Double Shinned; the Beam is Selected Hardwood; heavily ironed from Clevis to Standard; Reversible Cutters; extra strong Clevis with two Rings. Malleable Iron Hand Holds.

	Each
No. 105—With 7½ ft. Beam; 10 in. cut Weight 175 Lbs. Each	$40.00
Extra Landside Points; Weight 28 Lbs. Each	9.00

SAMSON

For Heavy Railroad or Township Work; Steel Moldboard, Steel Share, Cast Steel Landside, Steel Coulter, Adjustable Gauge Shoe, Heavy Iron Beam, White Oak Handles Ironed and Braced; a Strong compact light Plow for Rough Usage.

	Each
No. 26—Plow, 12 in. Cut; Weight 196 Lbs.	$30 00
Extra Moldboards; Weight 21 Lbs.	6 30
Extra Landsides; Weight 9 Lbs.	3 65
Extra Shares; Weight 8 Lbs.	4 50

BULL DOG

For Old Turnpike, Cobblestone and the toughest Hard-pan Work; Adjustable Gauge Shoe, Iron Beam, Ironed and Braced Oak Handles Crucible Steel Adjustable and Reversible Point.

	Each
No. 29—Plow, 12 in. Cut; Weight 319 Lbs.	$32 00
Extra Reversible Points; Weight 18 Lbs.	7.00

FIRE EXTINGUISHERS

A FIRE DEPARTMENT CONSTANTLY WITHIN REACH

Regular Minimax

Regular Minimax
Illust. Hanging on Bracket

Non-Freezing Minimax

Fire Department
Minimax

Auto Minimax

MINIMAX

Our Minimax Apparatus, in which the regular as well as the non-freezing solution is contained, is the product of years of experience, which not only eliminates all the faults of the reversible type extinguisher, but has many additional advantages such as the absence of hose and mechanism. The Glass Tube containing the acids, being hermetically sealed, is air-tight, which prevents the evaporation of the liquid, and when filled it remains in perfect working order for an indefinite period.

The Apparatus is set in action by striking the knob against the floor or wall, driving the knob in the full distance. It throws a stream of Fire Extinguishing Liquid from 35 to 50 feet. It requires only one hand to use it, thereby making it possible to climb stairs or ladders, open and close doors or windows or handle two Extinguishers at the same time, directing two streams of fluid on the fire at once.

Made of Best Steel, Painted; with Nickel Plated Trimmings. Bracket is furnished with every Apparatus

	Each
No. 31—Regular Size, Capacity 1½ Gals., Length 30 in. Weight, Filled, 18 Lbs. Each	$18 75
No. 32—Largest Size, Capacity 2½ Gals., Length 34 in. Weight, Filled, 29 Lbs. Each	23 25
No. 33—Smallest Size, for Private Residences; Capacity ¾ Gal., Length 20 in. Weight, Filled, 7 Lbs. Each	15 75
No. 34—For Fire Department, with Stop Cock and Safety Valve, Capacity 2½ Gals. Length 34 in. Weight, Filled, 31 Lbs. Each	23 25
No. 35—Non-Freezing, withstanding 54 deg. Frost; Capacity 1½ Gals., Length 30 in. Weight, Filled, 22 Lbs. Each	24 75
No. 36—Non-Freezing, withstanding 72 deg. Frost; Capacity 1½ Gals., Length 30 in. Weight, Filled, 22 Lbs. Each	27 75

	Each
No. 37½—Automobile Extinguishers; Furnished with Solid Leather Case and can be carried in any position. Capacity 10 Pints; Length 24 in.; Weight, Filled, 15 Lbs. Each	$37 50

EXTRA CHARGES

	Each
No. 101—For Extinguisher No. 31	$1 15
No. 102—For Extinguisher No. 32	1 15
No. 103—For Extinguisher No. 33	1 15
No. 104—For Extinguisher No. 34	1 15
No. 105—For Extinguisher No. 35	6 75
No. 106—For Extinguisher No. 36	4 90
No. 107½—For Extinguisher No. 37½	1 15

Note—Extra Charges for Nos. 31, 32, 33 and 34 are furnished Free of Charge whenever our Extinguishers are used on actual outbreaks of fire. Extra Charges for Nos. 35 and 36 cannot be furnished Free of Charge, even if Extinguisher has been used on a fire.

INSTRUCTIONS FOR FILLING

(1) Take a thoroughly clean pail, fill for Apparatus No. 31 with 11 pints, Apparatus No. 32 and 34 with 18 pints, Apparatus No. 33 with 6 pints and Apparatus No. 37½ with 10 pints of warm water, about 95 deg. Fahrenheit. Dissolve powder contained in cardboard box by stirring thoroughly. Rest Apparatus on its pointed end. Unscrew plunger on broad base, with attached wrench, take out perforated metal basket. (2) Fill tank with solution until water drips from nozzle. Let drip till overflow stops, it indicates tank is properly filled. Never manipulate pointed end, it is in proper condition. Place glass tube, pointed end first, in perforated metal basket, holding both horizontally. (3) See to it that washer rests flat underneath flange of metal basket and is not twisted. Insert metal basket containing glass tube into filled apparatus. (4) Take plunger, pull knob attached to pin, replace plunger on apparatus, and screw on tight with wrench. Be sure to use New Washer each time when refilling.

Extra charges for the Non-Freezing Extinguisher consist of one gallon can of non freezing liquid, one glass tube acid, one-half pound powder. This liquid is to be used in place of the warm water in recharging, as described above in the directions for filling.

NOW EXTINGUISHER IS READY FOR USE

(5) Nail or screw two piece bracket vertically on solid wall or woodwork. Adjust bracket as to size of machine. Hang and attach apparatus with muzzle upward. After having been used, clean apparatus thoroughly and refill again as stated.

FIRE EXTINGUISHERS

A Fire Department Constantly Within Reach

Used in Hotels, Public Buildings, Machine Shops, Factories, Mills, Hospitals, Asylums, Theaters, Museums, Railway Shops, Depots, Club Houses, Wholesale and Retail Establishments and Private Homes. Time is of the utmost importance when fighting an incipient fire, when every second saved frequently means the saving of many lives and thousands of dollars worth of property; nine times out of ten, prompt action will prevent what might be a disastrous conflagration. Statistics show that in all large cities more than half the fires are put out with Chemical Fire Extinguishers; Blazing Oil, Naphtha, Celluloid, etc., which can not be extinguished with water, are easily handled by these chemicals. It is not, How much can you afford to spend for fire protection, but how much can you afford to lose without it?

PARAGON

Approved by the National Board of Underwriters. Tested to 350 Lbs. Pressure; the Shell and Base are one Continuous Piece of Cold Rolled, Hard Tempered Copper, Riveted and Heavily Lined with Lead; the Inside is Coated to prevent Corrosion; the Cage which holds the Acid Bottle rests securely on a Rim within the Collar and can be instantly removed with the fingers; its Action is Instantaneous and Automatic.

	Each
No. 41—Capacity 3 Gallons, Height 22 in. Diam. 7⅛ in.; Will throw a stream of chemically charged water from 40 to 50 Ft., and one charge is as effective as 50 Pails of Water	$10.00

Weight 30 Lbs. Each

No. 111—EXTRA CHARGES

	Each
4 Oz. Sulphuric Acid, 1⅛ Lbs. Baking Soda	$0.60

HARDEN

Approved by many local Boards of Insurance Companies; Tested to 300 Lbs. Pressure; Made of Finely Polished Copper; will throw a stream of chemically charged water 50 feet.

While not officially recommended by the National Board, we have sold these for many years and will testify as to their efficiency and money value.

	Each
No. 42—Capacity 3 Gallons, Height 22 in., Diam. 7⅛ in.	$13 00

Weight 30 Lbs. Each

No. 43—Capacity 5 Gallons, Height 23 in., Diam. 9⅝ in.	15 00

Weight 50 Lbs. Each

EXTRA CHARGES

	Each
No. 112—3 Gal.; 4 Oz. Sulphuric Acid, 1½ Lbs. Baking Soda	$0.60
No. 113—5 Gal.; 6 Oz. Sulphuric Acid, 3½ Lbs. Baking Soda	80

For Machines exposed to Zero Weather, add 2 Lbs. of Fine Salt. Renew Charges Once Every Year

MANVILLE DRY POWDER EXTINGUISHERS

Of special value in fires of Acetylene, Gas and Oils, as well as Electrical fires, where water and other liquids often help to spread the flames; is a Nicely Decorated Tin Tube filled with a Dry Chemical Powder; is Non-Poisonous, will not explode, freeze nor corrode; is ready for Instant Use and is operated by simply dashing the contents at the base of the fire.

	Each
No. 45—Size of Tube 22x2¼ in.	$3 00

One Dozen in a Case; Weight 3 Lbs Each

HAND GRENADES

In Public Buildings, such as School Rooms, Offices, etc., these will be universally salable. The Saloon and Restaurant with its Vapor Lamp Urn is also a good field.

Glass Filled with a Chemical Compound; to be hurled at the base of a fire and broken.

	Per Dozen
No. 46—1 Pint; Height 2¾ in., Diam. 3 in..	$7 00
No. 47—1 Quart; Height 6 in., Diam 4 in ..	9 00

Weight 1 Pint 40 Lbs.; 1 Quart 60 Lbs. per Dozen

One Dozen in a Box

WATCHMAN'S CLOCKS

Station Box Open, Showing Key and Chain

Clock in Leather Carrying Case

Lock Station Box, Closed

This Clock has a Station or Registering Key of a very superior design; It is grooved and flanged and carries on the Blade a small Bat Shaped Hardened Steel Point which cannot be injured. In the operation of the Key this steel Point engages with the Marking Transfer, forcing the Figure or Male Die of the Marker into the Female Die so that the Dial Sheet which lies between the Marker and Matrix or Female Die receives a clear and strong embossing of the Figure. The Markers being contained within the Clock are entirely protected against wear or injury and the whole system is of such high quality and durable construction that unless destroyed by accident or malicious intent, it will last a life-time.

The Keys are heavy and strong and made of Delta metal, rust-proof and non-corrosive. They are so grooved and flanged and of such intricate design that their successful duplication is wholly impossible. Each station has its own particular key, the position of the tall-shaped steel point on the Blade or Flange of the Key determining its order of sequence.

The Clock is made with Aluminum Case, light, strong and non-corrosive. The Movement is the finest and most durable that the famous European experts on special goods of this sort are able to produce. It is an 11 Jeweled High Grade Powerful Watch Movement on a large scale so substantial that only injury of the most severe character will put it out of service. As regularly sold the Clock has Time-Piece Dial for control of the watchman on his rounds. The Dial record is for 24 hours per bit. Clock with 12 hour record can be supplied if desired. A safety device records on the Dial Sheet each and every opening or closing of the Clock, assuring detection should the watchman find the Key to open the Clock. The movement should be wound daily when the Dial Record is changed, but if forgotten it will run 60 to 72 hours without winding.

The Chain is of smooth finish and so heavily galvanized that the leaves of each link are practically welded together so that they cannot be separated, except by mechanical means and the use of considerable force. This would so mutilate the Chain as to result in immediate detection and discharge of the watchman.

The outfit consists of the Clock or Detector, the Leather Pouch or Case in which it is carried hung about the watchman's neck, the Proper Complement of Stations and a Year's Supply of Dials, Cast Iron Station Boxes 5½ in. High 2½ in. Wide by ¾ in. Deep with Spring Lock.

CHICAGO PORTABLE WATCHMAN'S CLOCK

	Each
No. 9—Nine Stations; Weight 18 Lbs. Each	$100.00
No. 16—Sixteen Stations; Weight 28 Lbs. Each	110.00
	Per Box
No. 9X—Extra Dials, for 9 Station Clock	$4.00
No. 16X—Extra Dials, for 16 Station Clock	4.00

365 Dials in a Box; Weight 1 Lb.

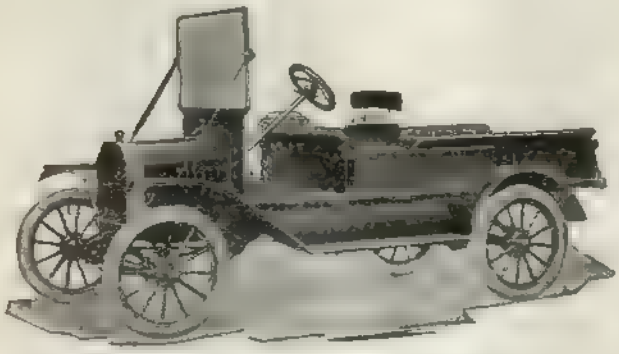
When Ordering Extra Dials, Send Sample, If Possible, or Give Number which Appears on Face of Dial

AUTOMOBILE BODIES

For Ford Cars

Ford Cars are being used everywhere for fast, light delivery service by Merchants, Wholesale Houses, Manufacturers, Truck Men, Farmers and all who handle articles which must be moved rapidly at low cost

F. O. B. Indianapolis



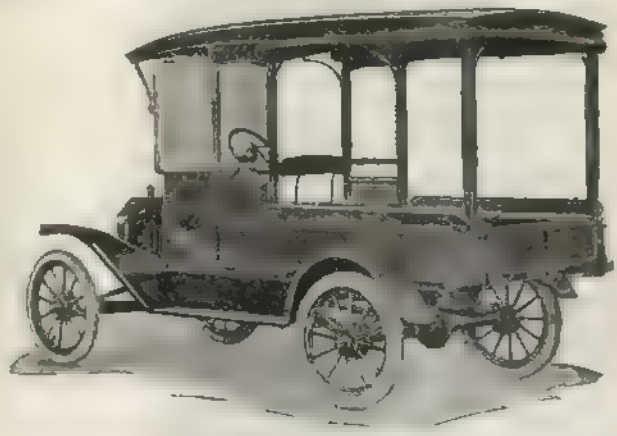
OPEN BODY; SKELETON SEAT

A Business Body for Ford Chassis, especially for Farmers, Dairy Men, Transfer Men and all light, general deliveries; Will give a Maximum of Service and combines Strength with Lightness.

Each

No. 207—Loading Space back of Seat, 43x63 in. Height of Panels, inside, 10 in., the Flare Boards are 5 in. Wide, with heavy Edge Irons and Braces; Hardwood, Painted Dark Green; Well braced Body, metal bound Corners; Floor is protected by Iron Strips running lengthwise; Skeleton Seat full width Cushion of good grade Artificial Leather, Complete with Rear Lamp Bracket, Toe Boards and Irons and all Irons necessary to attach ... $50.00

Weight, Crated, 400 Lbs. Each



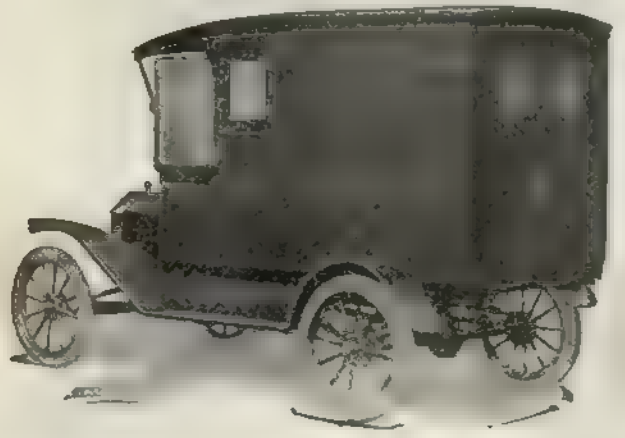
EXPRESS BODY; EXPRESS TOP

A Commercial Body for Business Men, Grocers, Butchers, Plumbers, Gas and Telephone Companies and all who do general trucking or delivery

Each

No. 205—Loading Space, back of Seat, 43x63 in., and 54 in. High; Height of Panels, inside, 10 in.; the Flare Boards are 5 in. Wide with heavy Edge Irons and Braces. Hardwood, Painted Dark Green, Six Post Express Top, well Ironed and Braced to withstand rough driving, Full slatted Deck, covered with heavy Rubber Duck; Heavy, black Curtains with large Mica Windows on either side of Driver's Seat, Full width Cushion of good grade Artificial Leather, Folding Lazy Back on Seat, Complete with Rear Lamp Bracket, Toe Boards and Irons and all Irons necessary to attach $91.00

Weight, Crated, 600 Lbs. Each



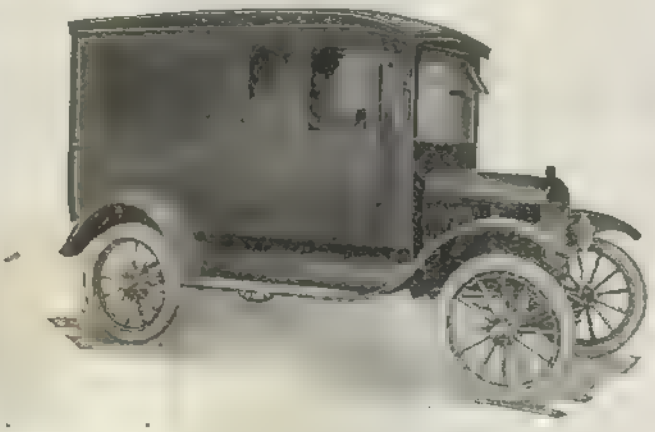
PANEL TOP BODY

Especially adapted to all purposes, where a high class durable and thoroughly weather-proof Body is needed for deliveries.

Each

No. 201—Loading Space, back of Seat, 56x43 in., and 53 in. High; Solid Side Panels of heavy Gauge Sheet Steel fully slatted on inside, Corners are securely braced to prevent racking; the Deck is covered with heavy Rubber Duck, Double Rear Doors of Steel, with two large oval Glass Windows; Glass Window on both sides of Driver's Seat; Full width Seat, with Artificial Leather Cushion and Folding Lazy Back, Painted Dark Green, neatly striped. Complete with Rear Lamp Bracket, Toe Boards and Irons and all Irons for attaching, Windshield is not included. $120.00

Weight, Crated, 725 Lbs. Each



SUBURBAN VESTIBULED PANEL BODY

An ideal Delivery Body for all the year around, it combines a high class appearance with durability and is thoroughly weather-proof.

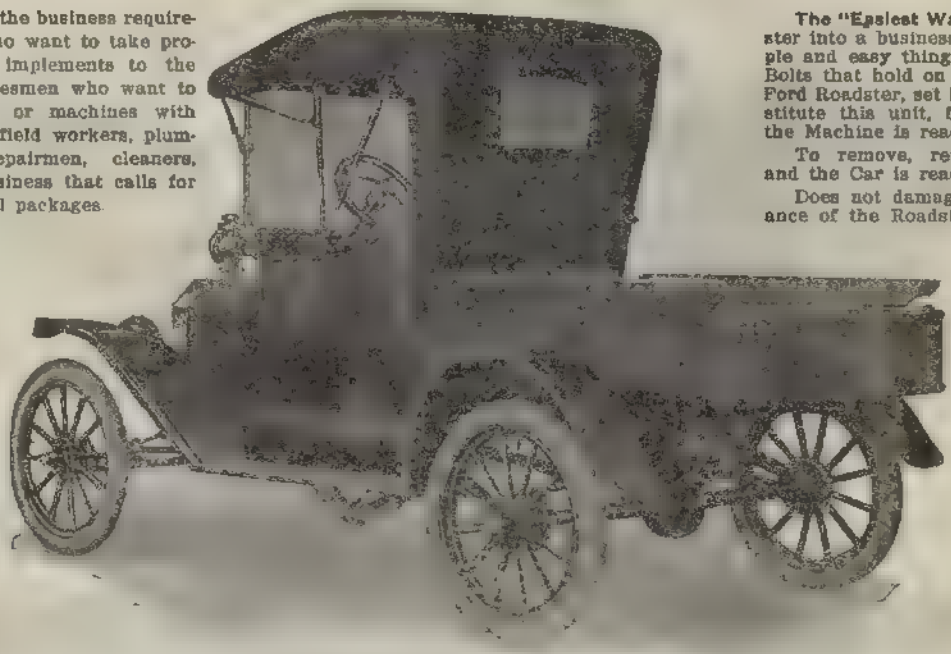
Each

No. 218—Loading Space, back of Seat, 56x43 in., and 53 in. High, Solid Side Panels of heavy Gauge Sheet Steel fully slatted on inside, Corners are securely braced to prevent racking; the Deck is covered with heavy Rubber Duck, Double Rear Doors of Steel, with two large oval Glass Windows, the left Door is stationary, the right Door is hung on detachable Hinges; Both Doors can be removed in nice weather, in a few minutes, the Front is constructed to give a clear view, Full width Seat with Artificial Leather Cushion and Folding Lazy Back, Painted Dark Green, neatly striped, Complete with Rear Lamp Bracket, Toe Boards and Irons and all Irons for attaching..... $169.00

Weight, Crated, 750 Lbs. Each

AUTO SLIP ON BODIES

Designed to meet the business requirements of farmers who want to take produce to market or implements to the shop for repairs, salesmen who want to carry sample cases or machines with them, dairymen, oil field workers, plumbers, telephone repairmen, cleaners, butchers, or any business that calls for the carrying of small packages.



The "Easiest Way" to convert a Roadster into a business Vehicle; It is a simple and easy thing to unfasten the four Bolts that hold on the rear section of a Ford Roadster, set it to one side and substitute this unit, fasten four Bolts and the Machine is ready for business.

To remove, reverse the operations and the Car is ready for pleasure.

Does not damage or mar the appearance of the Roadster.

SLIP-ON BODY FOR FORD ROADSTERS

Each

No. 208—The Body is well built, and has a Loading Space 34 in. Wide by 62 in. Long, Painted Solid Black; Side Panels are 8½ in. High Inside, and Topped with Hardwood Rails, Outside Body Braces, 5 in. Flare Boards, Drop End Gate, Easily put on or taken off as it Weighs less than 200 Lbs., the necessary Bolts for attaching to the Car, also Special Lamp Bracket, are included with each Body; No change of Rear Fenders is necessary for this Style Body $17.00

Shipping Weight 175 Lbs. Each

AUTOMOBILE TRAILERS

Universal Plate End Hitch

This Hitch permits of action in three different directions, minimizing the load on the Car. It is regular equipment on Two Wheel Models.

TWO WHEELED AUTO TRAILERS

Body—Outside, Size 40x84 in., with 10 in. Panels; Hardened Sills and Hardwood Rail on Top of Panels; Bottom of Body protected by Iron Strips running lengthwise; Drop End Gate, Front and Rear; Body strongly built, extra well Ironed and Braced throughout; 5 in. Flare Boards can be furnished at extra cost.

Springs—1⅝ in., 5 and 6 Leaf Platform Springs, hung under Axle.

Axle—1¼ in., Coached

Track—Narrow (4 ft. 8 in.) or Wide (5 ft. 2 in.)

Bearings—Regularly furnished with common long distance Wagon Spindle.

Wheels—Sarven patent with 1⅝ in. Spokes and 1¼ in. Riveted Rims; No. 13 Flange, specially high and riveted between each Spoke; Absolutely best grade Hickory, 32 in. High, ⅝ in. Oval Edge Steel Tires Regular.

Connection—Plate End Universal Hitch is regular on this Trailer. See illustration.

Capacity—About 800 Lbs.

Each

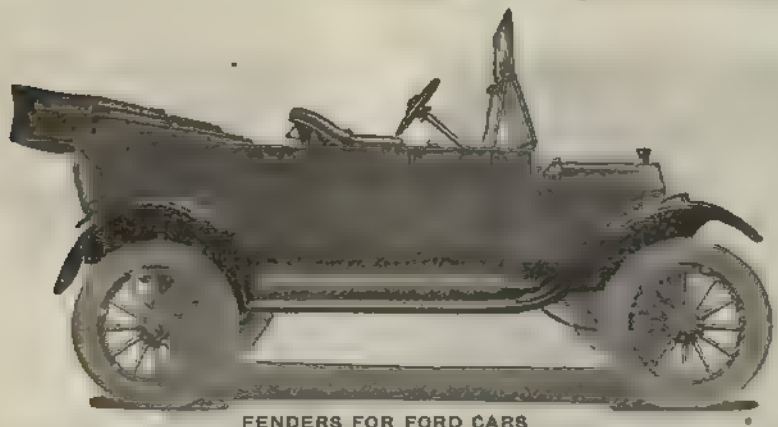
No. 301—Ball Bearing Axle, 1¼ in. Solid Rubber Tires and Flare Boards; Complete as described; Painted Green $65.00

No. 301A—With Plain Axle and Steel Tires, otherwise same as above 50.00

Open Stock; Shipping Weight 550 Lbs. Each

If Trailer is wanted for Ford Cars, order Ford Spring Hitch, for shipment from Factory at same price as above

AUTOMOBILE ACCESSORIES



FENDERS FOR FORD CARS

For 56 in. Tread; Will fit all Ford Cars made in 1913, 1914, 1915 or 1916, except rear of Sedan Model

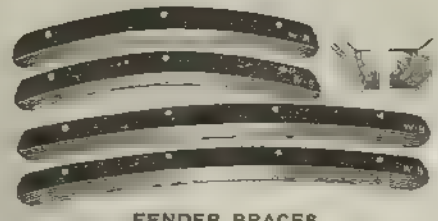
Width 10 in.; These Fenders beauty the Car and provide better protection to the Machine because of their greater width

FULL SETS	Per Set of 4
No. 1F—Full Set of Four	$16.00

Weight 90 Lbs. per Set

HALF SETS	Per Half Set
No. ½F—Two Front Fenders Only.	$8 00
No. ½R—Two Rear Fenders Only....	8.00

Weight 45 Lbs. per Half Set



FENDER BRACES

For Ford Cars

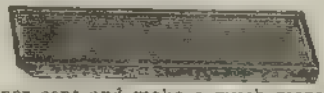
Per Set of 4

No. 6—A Neat Black Enameled, Pressed Steel Brace of correct curvature, designed to attach Front and Rear Fenders to Mud Splasher; Complete with Nickel Plated Screws and Nuts ready for attachment .$0.65

One Set in a Box; Weight 1⅛ Lbs. per Set

COMPLETE RUNNING BOARDS

For Ford Cars



These Running Boards improve the appearance of Ford Automobiles one hundred per cent and make a much more substantial Step than the metal board furnished with the car a step that will not sag in the middle; Will not rattle; Will not rust, But will add substantially to the fine appearance of the Car.

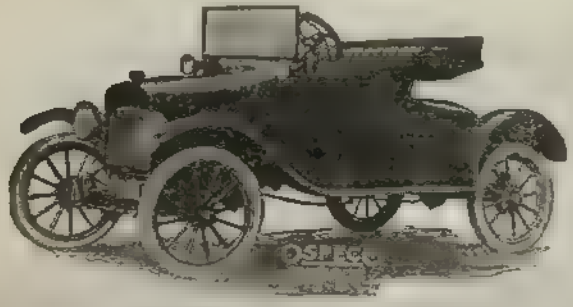
LINOLEUM	Per Pair
No. A—Linoleum Top (Gray or Brown), with Aluminum Molding	$6.00

Weight 12 Lbs. per Pair

ALUMINUM	Per Pair
No. C—Pyramid Aluminum Top, with Aluminum Molding....	$7.00

Weight 12 Lbs. per Pair

Set includes Bolts and Nuts, Finished to Match Boards



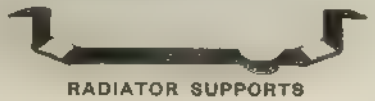
OSPECO STREAMLINE HOOD AND RADIATOR SHELL

Fits all Cowl Dash Ford Cars and gives the same type of construction and Streamline Effect as on high priced cars; Can easily be put on in 15 minutes; Rigid and strong and will not rattle.

Each

No. 10—Made of 22 Gauge Steel, Black Enameled with several coats and baked at a high temperature; Concealed, waterproof Hinges, Hard Rubber Cap, Anti Squeak Lacing ..$17.50

Weight 25 Lbs. Each



RADIATOR SUPPORTS

For Ford Cars

Supports the weight of Radiator, and prevents the side lugs from breaking off, which in turn permits the Radiator to sag; When this occurs, the tubes separate, necessitating repairs; Protects new Radiator and extends life of an old Radiator already weakened or broken.

Each

No. 8—Made of Stamped Steel, Black Enameled, Complete with Felt Supporting Rests.....$0.65

One Dozen in a Bundle; Weight 12 Lbs. per Dozen

CHANDLER STREAMLINE HOOD AND RADIATOR

For Ford Cars

The Chandler Radiator is Genuine Cellular Construction; Has a 3 in. Core; Is made of separate Top and Bottom Tanks; Has a Double End Case and a Genuine Brass Casing.

It is a Radiator of Quality and will give unlimited service and satisfaction. It has a 4 Quart Auxiliary Tank, increasing Cooling Capacity at least 20 per cent.

It is tested to 10 Lbs. Air Pressure to the square inch. It will improve the looks of the Car and give it class and distinction; Complete in every detail so that it can be installed in a few minutes.

Stream Line Hood is made of 20 Gauge Steel; It has six Louvers or Openings on each side; It is coated with three coats of Japan and will retain its good looks indefinitely.

Each

No. 1—Black Enameled Hood; Brass Radiator $45.00
No. 2—Black Enameled Hood; Nickeled Radiator 46.00

One in a Box; Weight 80 Lbs. Each

ONE MAN TOPS

FOR FORD RUNABOUTS

	Each
No. 1504—Made of Rubber, Complete with Regular Side Curtains	$28.00
No. 1505—Made of Rubber, Complete with Jiffy Side Curtains	31 00
No. 1506—Made of Mohair, Complete with Regular Side Curtains	28.00
No. 1507 Made of Mohair, Complete with Jiffy Side Curtains	31.00

Weight 30 Lbs. Each

FOR FORD TOURING CARS

	Each
No. 1500—Made of Rubber, Complete with Regular Side Curtains	35.00
No. 1501—Made of Rubber, Complete with Jiffy Side Curtains	38 00
No. 1502 Made of Mohair, Complete with Regular Side Curtains	35 00
No. 1503—Made of Mohair, Complete with Jiffy Side Curtains	38.00

Weight 60 Lbs. Each

SIDE CURTAINS

Factory Shipment from Ohio, except No. 1400, Rear Curtain Lights

For Ford Cars: Made of Rubber Cloth, same as furnished with the Car originally

	Each
No. 1425—For Ford Touring Cars, Models 1912, 1913, 1914 1915 or 1916	$12.00
No. 1426—For Ford Runabout Cars, Models 1912, 1913, 1914, 1915 or 1916	8 00

Weight 12 Lbs. Each

Note—Always give Year and Model of Car when ordering

TOP RECOVERINGS

Shows Appearance of Old Top — Shows Top After Recovered

Makes an old Top like new at small expense; Easily attached, simply take out the tacks in the rear and front, take off the old covering and back curtain and put in the new covering; Complete Outfit consists of Roof, Quarter Backs, Stays and Back Curtain, Complete with all Fastenings, ready to put on.

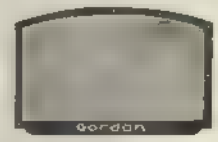
	Each
No. 1410—For Ford Touring Cars; Models 1912, 1913, 1914, 1915 or 1916	$12.50

Weight 12 Lbs. Each

No. 1411—For Ford Runabout Cars; Models 1912, 1913, 1914, 1915 or 1916	10 00

Weight 7½ Lbs. Each

REAR CURTAIN LIGHTS



For replacing broken Curtain Lights, equipped with special Fasteners and can be attached in a few minutes, Not necessary to send to repair shop.

	Each
No. 1400—For All Ford Cars	$0.80

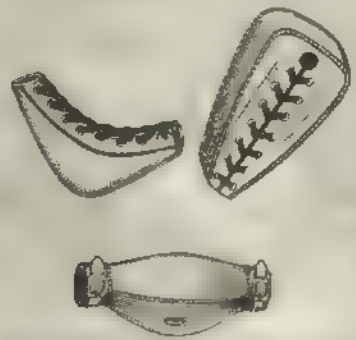
Weight 8 Oz. Each

STEERING GEAR BOOTS

For Overland Cars

	Per Set of 4
No. 1336—Makes it possible to pack the Joints of the Steering Gear with Grease, thereby eliminating Rattle and Wear, Improved Steering	$1.25

Weight 1 Lb. per Set



For Ford Cars

	Per Set of 8
No. 1540—Complete with Laces; Made of Waterproof Leather; These Boots make it possible to pack the Joints with Grease, which does away with the Wear and therefore eliminates Rattle, Makes it easier to Steer.	$1.00

Weight ¾ Lb. per Set

AUTOMOBILE COVERS

HEAVY PAPER COVERS

Cheaper than cloth and furnish a better protection; the Cover is made of Heavy Durable Paper, is securely reinforced to prevent tearing, and completely covers the Car. This protects the Car from Dust, Dirt, Cold and Moisture; They also protect Tires and preserve the life of the Rubber by excluding light.

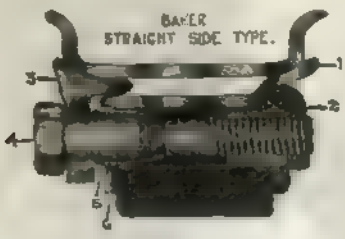
	Per Dozen
No. 7P—Seven Passenger Size	$42.00
No. 5P—Five Passenger Size	36 00
No. 6F—Ford Special	30 00
No. 8E—Electric	46 00

Average Weight 10 Lbs. Each

Five Passenger Covers will cover the popular priced Touring Car and Roadster with Wheel Base up to 115 in., for larger Cars the Seven Passenger Size is preferable. Ford Covers are for Cars with Short Wheel Base.

AUTOMOBILE RIMS

When Ordering Spare Rims or Parts of Any Kind, Always Give Size of Tire, Make and Year of Car, and State Whether Rims Are Wanted for Straight Side or Clincher Type of Tire



BAKER DEMOUNTABLE RIMS

These Rims are made of Steel, Sherardized Finish and are Complete with all Bolts and Clamps, ready to install; They can be put on very quickly by using a No. 1916 Rim Contractor, shown on page 3300-77

BAKER TYPE

Any Standard make of Tire may be used on these Rims

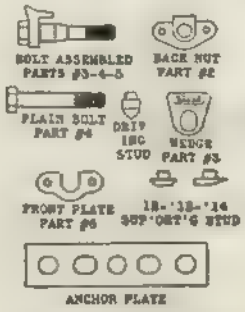
Nos.	B33½	B34	B35	B36
Size, In.	32x3½	32x4	34x4	36x4½
Each	$2.98	3.05	3.05	4.10

TYPE W OR STANWELD

Can be used on Continental or Stanweld Felloe Bands

Nos.	W33½	W34	W35	W36
Size, In.	32x3½	32x4	34x4	36x4½
Each	$3.05	3.20	3.20	3.80

Open Stock; Average Weight 15 Lbs. Each



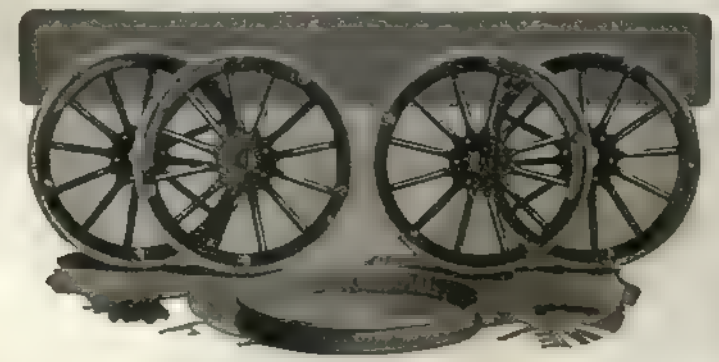
BAKER RIM PARTS

	Each
No. 345L—Long Baker Bolts Assembled, Parts 3, 4 and 5	$0.30
No. 345B—Short Baker Bolts Assembled; Parts 3, 4 and 5	.30
No. 3BW—Baker Wedges	.12½
No. 4BA—Anchor Plates	$0.30
No. 4PB—Plain Bolts, Short	.12½
No. 5PB—Plain Bolts	.12½

TYPE W OR STANWELD RIM PARTS

	Each
No. 71W—Wedges	$0.20
No. 3½W—3½ in. A. L. A. M. Bolts	$0.10
No. 4½W—4½ in. A. L. A. M. Bolts	$0.10

All Parts, Open Stock



KELSEY DEMOUNTABLE WHEELS

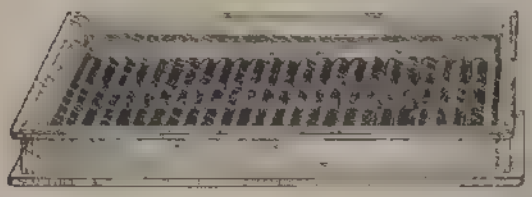
For Ford, Maxwell and No. 490 Chevrolet Cars; Demountable Rims insure against the annoying delay and the disagreeable work of changing tires on the road; the Complete equipment consists of Four New Standard Wheels, all the same Size, without Hubs; One Extra Rim on which to carry an Inflated Tire and 25 Bolts for replacing the Old Hubs, a Brace Wrench completes Set.

	Per Set
No. 75—Black Finish; Weight 120 Lbs. per Set of Four	$28.00
No. 75½—Natural Finish; Weight 120 Lbs. per Set of Four	28.00

FRANKLIN SELF FILLING FOUNTAIN PEN ASSORTNMENTS

Factory Shipment Only

There are no openings in the Barrel; all parts are ink tight, no rubber sacks to break or get out of order.
To Fill, simply insert the Nozzle of Pen End in the Ink and draw the plunger out once screw parts together and go ahead and write Pen is never out of commission even if the Filling Device fails to work as the nozzle can be unscrewed and the Barrel filled just like an ordinary old style fountain pen. This is a feature contained in no other self filling pen. The Self-Filling Device may be entirely discarded and the Pen will work perfectly.

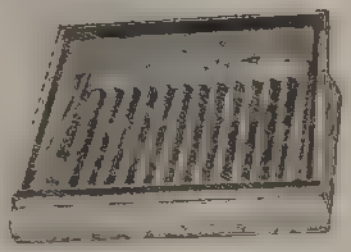


Per Assortment

No. 2HG—Assortment Contains 24 Regular and Safety Self-Filling Fountain Pens, as listed below; All Self-Filling Plain Holders; In a Fine Display Case, Covered with Plate Glass; Golden Oak Finish $64.00

Weight 9½ Lbs. per Assortment

	Retail Price		Retail Price
4 No. 1SF Pens.	$1 50	4 No. 80½ Pens.	$3.00
4 No. 2SF Pens	2 00	2 No. 90½SF Pens.	4.00
4 No. 3SF Pens	2 50	2 No. 90SF Pens.	4.00
2 No. 4SF Pens	3 00		— —
2 No. 80 Pens.	3.00	24 Pens Retail for.	$64.00



Per Assortment

No. 1HG—Assortment Contains 12 Regular and Safety Self-Filling Fountain Pens, as listed below; All Self-Filling Plain Holders; in a Fine Display Case, Covered with Plate Glass; Golden Oak Finish. . $32.00

Weight 6 Lbs. per Assortment

	Retail Price		Retail Price
2 No. 1SF Pens.	$1 50	2 No. 80½ Pens.	$3.00
2 No. 2SF Pens.	2 00	1 No. 90 Pen.	4.00
2 No. 3SF Pens.	2 50	1 No. 90½ Pen.	4.00
1 No. 4SF Pen	3.00		—
1 No. 80 Pen	3.00	12 Pens Retail for.	$32.00

GENERAL DESCRIPTION OF EACH PEN IN ASSORTMENT

We Positively Will Not Break Assortments

Sectional View of Parts Showing Self-Filling Device

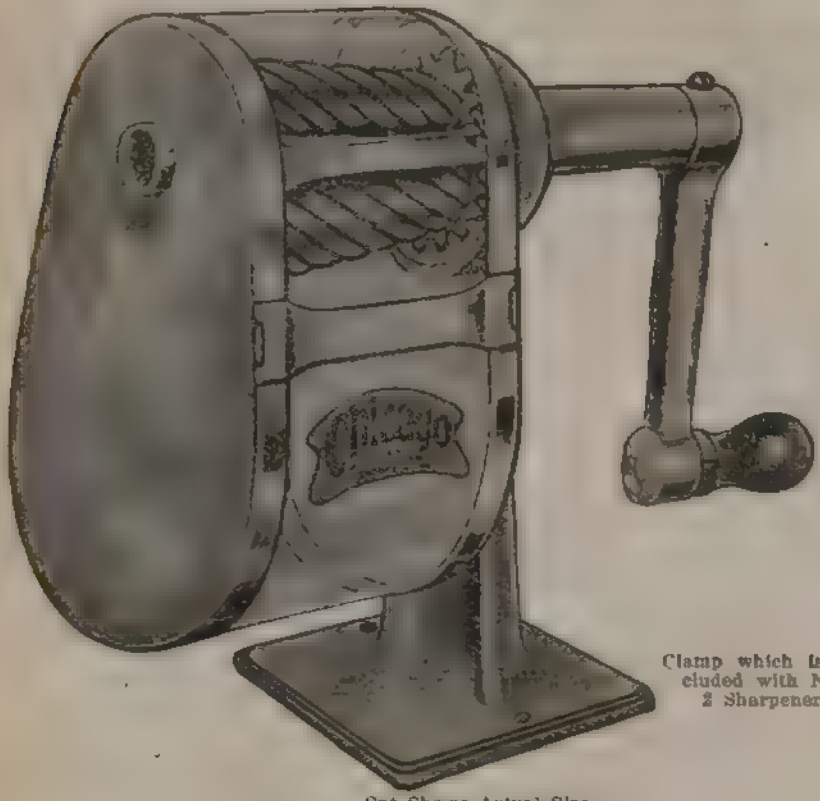
Self-Filling; Chased Rubber Barrel; 14K Gold Pen Point

	Retail Price, Each
No. 1SF—With No. 1 Pen Point; Length Closed 5¾ in Diam of Barrel ⅜ in	$1.50
No. 2SF—With No. 2 Pen Point; Length Closed 5¾ in; Diam of Barrel ⅜ in	2.00
No. 3SF—With No. 3 Pen Point; Length Closed 5¾ in, Diam of Barrel ⅜ in	2.50
No. 4SF—With No. 4 Pen Point; Length Closed 5¾ in.; Diam of Barrel ⅜ in	3 00

Safety Self-Filling; Chased Rubber Barrel; With Special Size 14K Gold Pen Point; Cap Screw On

	Retail Price, Each
No. 80 —Long Barrel; Length Closed 5⅛ in.	$3 00
No. 80½—Short Barrel; Length Closed 4⅛ in.	3.00
No. 90 —Long Barrel; Length Closed 5⅛ in	4.00
No. 90½—Short Barrel; Length Closed 4⅛ in.	4.00

PENCIL SHARPENERS



Clamp which is included with No. 2 Sharpener

Cut Shows Actual Size

CHICAGO

Hand Feed, Twin Milling Cutter Type

Sharpens standard size pencils and automatically stops cutting when pencil is properly pointed

Will not break leads.

Cutters will not dull until many thousand points have been produced. New ones cost but a trifle.

Very low priced yet guaranteed to give lasting satisfaction in daily use.

Suitable for service in any position.

Needed by—and priced within the reach of every pencil user everywhere.

Each

No. 2—Nickel Plated Standard, with Highly Polished, Nickel Trimmed Celluloid Shaving Receptacle; Height 4½ in.; Complete with Clamp for fastening.....$1.25

One in a Box; Weight 1 Lb. Each

No. 1—Without Clamp. Otherwise same as above; Must be fastened with Screws 1.00

Per Pair

No. 12—Extra Cutters, for Chicago Pencil Sharpener $0.50

Cut Shows Actual Size

DEXTER

Hand Feed, Twin Milling Cutter Type

Automatically produces any point desired from blunt to fine on pencils or crayons. When pointing heavy leads and crayons, needle point is not wanted; Will not break leads; Cutters will produce more than 60,000 pointings before dulling; This is twice the service you can expect of any lower priced pencil sharpener.

Point Adjustor makes it possible to regrind Cutters any number of times and always produce same range of points as original.

Suitable for service in any position; a Sharpener designed for those who will pay a reasonable price for the best made and best possible to make

Each

No. 3—Highly Polished Nickel Silver Throughout; Height 5 in.; Oil Wells, kept filled, will automatically lubricate this Sharpener in every working part $3.50

One in a Corrugated Mailing Carton

Weight 1¼ Lbs. Each

Per Pair

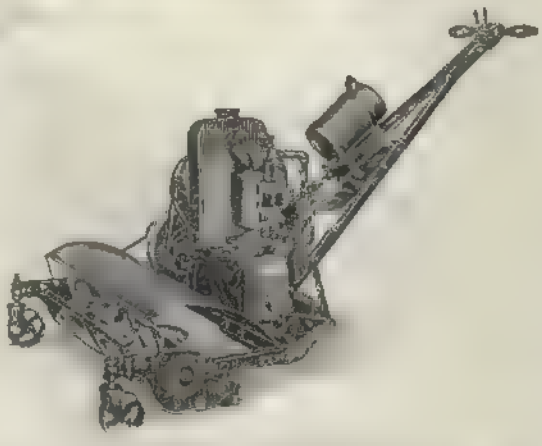
No. 4—Extra Cutters, for Dexter Pencil Sharpener $0.75

MOTOR LAWN MOWERS

For use on Private Lawns comprising two or more acres, Parks, Cemeteries, Public Grounds, Golf Links and the like; the great flexibility of this Mower permits cutting of grass in ditches and hollows and on hills with the same ease and neatness as when on level ground; Will climb a 35% grade and cuts a swath 25 in. Wide, two or three miles long per hour, which is equivalent to five acres per day; Consumes about One Gallon of Gasoline per five acres.

It is possible to cut close up to, and around trees, shrubbery, walks and driveways.

The Motor has been utilized in such a way that anyone can operate it by merely following the printed directions and there is nothing to get out of order, nor any parts to wear out prematurely.



The power from the Motor is transmitted separately to the Cutting Knives and the Traction Roller, by means of two single friction Clutches, so as to make it possible to instantly throw the Cutting Knives, or the Traction Roller, in or out of gear.

If the operator wishes to cut through a patch of heavy, unusually tough, high grass, he can throw out his Traction Clutch and concentrate the full power in the Cutting Knives, operating it as a hand mower, or if he desires to cross a walk or use the Traction only in moving his Mower from place to place he can throw the Cutting Knives out of gear and avoid all possibility of damaging the Knives, through encountering rocks or other rigid obstacles.

FULLER AND JOHNSON

Each

No. 250—Width of Cut 25 in., Diam. of Cutter Reel 6½ in.; Four Crucible Steel Revolving Knives, 1 in. Wide; Tool Steel Cutting Edge Bed Knife, Wooden Roller, 2½ in. Diam., High Grade Cast Iron Frame and Guide Wheels, Wrought Steel Traction Drum, Heavy Wrought Steel Full Braced Handle 4 ft. Long, Cut Adjustment ⅛ to 2 in., Cutting Speed (changed at will of operator) 2 to 3 Miles per Hour, Cutting Capacity 5 Acres per Day, Climbs 35% Grade, Gasoline Consumption, About One Gallon per Day, Length Over all, 6¼ ft.; Color, Brewster Green, Gold Stripings..... $250.00

Shipping Weight, Crated, 290 Lbs. Each

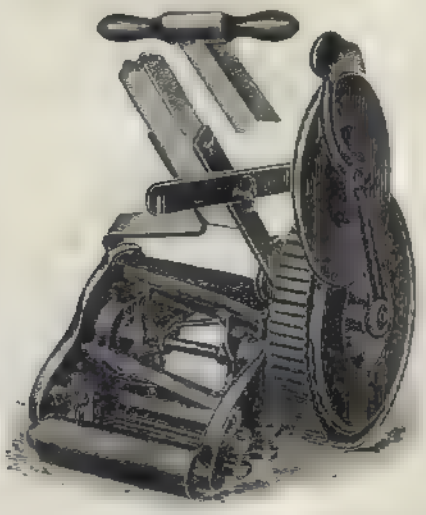
Motor—Fuller & Johnson Single Cylinder, Four Cycle, Enclosed Water Cooled; 3 in. Bore, 3 in. Stroke, 3½ Horse Power, A. L. A. M. Rating, Speed of Motor Controlled by Governor, High Tension Magneto Ignition, Traction Roller and Cutter Reel Controlled by separate expanded Ring Clutches.

Manufacturer's Warranty—We warrant each new Fuller & Johnson Motor Lawn Mower manufactured by us to be first class in material and workmanship, to be in perfect running order when leaving the factory and to run properly if given reasonable care and attention.

We furthermore warrant each Fuller & Johnson Motor Lawn Mower to be free from defects in material and workmanship and will replace, free of charge at our factory any parts proving defective in material and workmanship within one year of date of purchase, upon the defective part being delivered to us for inspection at factory, transportation charges prepaid.

It is understood that we are not to be held responsible for the failure of the Motor Lawn Mower to operate successfully if the instructions furnished with the Machine are not followed nor for injury due to accident, carelessness or abuse.

LAWN TRIMMERS



CAPITOL LAWN TRIMMERS

For Trimming and Edging parts of Lawn which Mower cannot reach. Edges Lawn and Trims around Trees, Fences, Walls, etc. Has 4 Crucible Steel Blades, 6 in. Long, hardened and tempered in Oil; Hardwood Roller; strongly made and nicely Polished and Finished

Each

Complete with Edger $9 00
Without Edger 8.00

Weight 30 Lbs. Each

ELECTRIC LAWN TRIMMERS

For Trimming around Trees, Shrubbery, Walks, Walls, Hedges and places which cannot be reached by an ordinary Lawn Mower; much easier and quicker than Grass Shears; Will Clip Grass of any height and all ordinary growths of weeds.

Each

Electric—Cuts a Swath 6 in. Wide, Cutter Bar has 6 Sets of Shears which cut with both the Opening and closing of Blades; Blades are Self-Sharpening and are Adjustable by Set Screw $8.00

Weight 20 Lbs. Each

LAWN ROLLERS

WATER WEIGHT

Roller Bearing; Adjustable Weight; Upright Handle; Easy Running

Rolling will cure 50% of Lawn troubles; it will eradicate weeds, keep grass from dying and promote even growth, over which the Mower will easily operate; it also prevents the work of moles, worms, ants, etc.

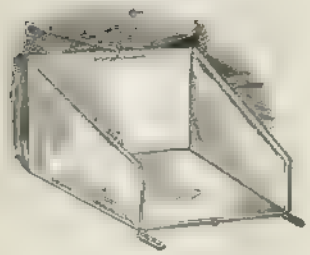
Rolling compresses the grass roots so they absorb moisture from the sub-soil. Alternate freezing and thawing produces a loosening and heaving effect on the ground. The earth settles faster than the grass roots and if not rolled and brought into firm contact with the soil below, are left exposed to the air, where they will dry out and die. Capillary attraction is assured by frequent use of the Roller. Often the sun will dry out, bake and crack the top soil unless it is rolled.

Each

No. WB5—Diam. 18 in.; Length 24 in.; Weight Empty 75 Lbs., when Filled 300 Lbs. $13 00

No. WB7—Diam. 24 in.; Length 24 in.; Weight Empty 125 Lbs., when Filled with Water 500 Lbs. 17.00

GRASS CATCHERS



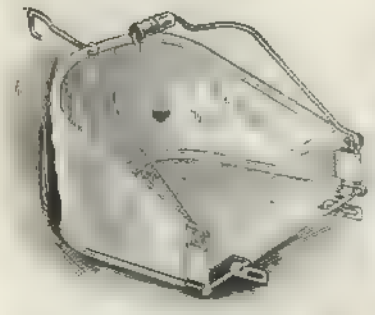
CANVAS BOTTOM

Made of Fine Quality White Duck; Heavy Galvanized Wire Frame; Adjustable Steel Hooks, will fit any Mower and always in position to receive grass.

Per Dozen

No. 20—Adjustable to all Mowers from 12 to 16 in., 8 in. Deep. $8.00

Weight 35 Lbs. per Dozen



GALVANIZED STEEL BOTTOM

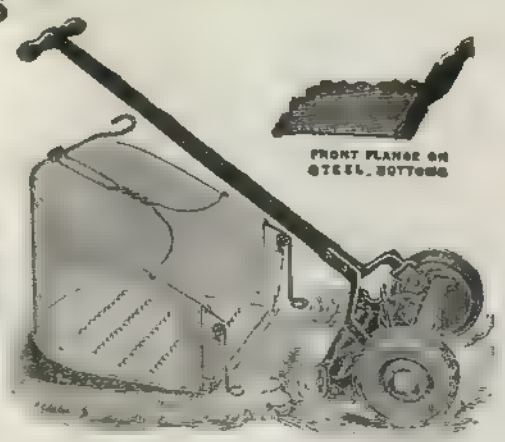
Made of Fine Quality White Duck; Heavy Galvanized Wire Frame; Heavy Steel Bottom; Adjustable Steel Hook; will fit any Mower and always in position to receive grass.

Per Dozen

No. 25—Adjustable to all Mowers from 12 to 16 in., 12 in. Deep.....$10.00

No. 25L—Adjustable to all Mowers from 18 to 20 in..... 12.00

Weight 50 Lbs. per Dozen



EASY EMPTY; GALVANIZED STEEL BOTTOM

Easily attached or detached, easily adjusted to fit any size or make of mower; can be raised or lowered, set forward or backward; made narrower or wider; and, once fitted, needs no further attention; full directions with each Catcher

The method of attaching duck to Galvanized Bottom is strongest possible; made with special machinery, which rolls the Duck and Metal together without injury to the Duck and makes a joint—strong, light, neat and durable.

A Flange in front effectively prevents the grass from being carried forward against the Roller and adds to the grass holding capacity of the catcher. Per Dozen

No. 10G—18x20 in.; for 12 to 16 in. Mowers; Capacity ¾ Bushel; Wt. 50 Lbs. per Dozen.....$18.50

No. 12G—22x22 in.; for 16 to 22 in. Mowers; Capacity 1 Bushel; Wt. 60 Lbs. per Dozen. 22.00

One Dozen in a Bundle, Wrapped in Burlap

GRASS OR REAPING HOOKS

HARTFORD

One Piece Blade and Shank

A Light, Serviceable Tool; Polished Crucible Steel Blade, Ground Sharp and Whetted; The Offset Handle enables the user to have a clear swing with Blade close to ground; Plain Handle.

Per Dozen

Hartford—12 in. Blade; Length Over-all 19 in. $7.20

Weight 7 Lbs. per Dozen

NORTHERN KING

Open Hearth Steel, Hand Hammered Blade of proper shape, strength and lightness, tempered in oil; with Ferrule.

Per Dozen

Northern King—12x1¼ in. Serrated Edge Blade $3.00

One Dozen in a Box Wt 10 Lbs. per Doz

LITTLE GIANT

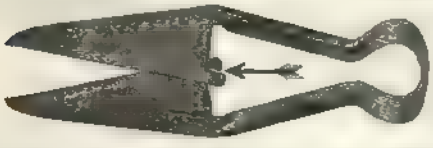
Per Dozen

13x2 in. Sheet Steel Blade, Polished on Upper Side; Lower Side Natural Color; Shank Drop Forged Steel; Cruciform in Section Painted Red; Wood Handle, Black Enameled Finish, Steel Ferrule $6.00

One Dozen in a Pasteboard Box

Knocked Down; Weight 10 Lbs. per Dozen

GRASS OR LAWN SHEARS



These Shears have a projecting Lug on each Blade at the point where they overlay which locks the Blade together so Cutting Edges are always in position, these Shears with the "Sure Klip Lock Blade" are a great improvement over the old Grass Shears

Per Dozen

Hartford 5½ in. High Grade Polished Steel Blades; Tempered Spring Steel Bow Handle; Polished Blades and Grips; Length Over-all 12 in.....$8.00

Half Dozen in a Box; Weight 10 Lbs. per Dozen

Per Dozen

Superior—5½ in. Straight Steel Blades, Length Over-all 12 in., Single Spring $3.00

Half Dozen in a Package; Weight 8½ Lbs. per Dozen

GILBERT WOOD SPLIT PULLEYS

In Ordering, Give Style, Diameter, Face and Size of Shaft; We send Crown Face unless Flat is Specially Ordered

Made of Seasoned Maple, finished with two coats of Shellac Varnish. Maple presents the best surface, is hard, close and fine grained and takes a high polish, transmitting highest power with least tension; is lighter and causes less friction to the journals and less strain on the Shafting than iron pulleys. Spokes set to cut the air do not collect dust. All are Bored for Round Bushings. 4 in. Diam. are bored 1¼ in.; 5 to 16 in. Diam. inclusive, bored 2 in.; 18 to 48 in. Diam. inclusive, bored for 3⅛ in. Bushings.

STYLE B, SPOKED

We carry in Stock Style B, from 12 in. Diam. by 3 in. Face to 36 in. Diam. by 10 in. Face

Style C, from 4 in. Diam. by 3 in. Face to 10 in. Diam. by 10 in. Face.

All Other Sizes Shipped Direct from Factory.

EXTRA BUSHINGS

Per Double Inch..... ...$0 05

STYLE C, SOLID

Round Bore; the Rim is both Nailed and Glued; Spokes are Dovetailed and Glued into the Rim, and set in a line running direct from the center of the shaft to the Rim; Perfectly Balanced, cannot get out of round.

Is Bolted together, the Nuts on the Clamping Bolts being covered with Sectional Blocks which cannot get out of place; all parts are accessible from the face, by using different Bushings, the Same Pulley will fit different sizes of Shafting.

STANDARD LIST PRICES ADOPTED DECEMBER 1st, 1908

Diam. Inches	3	4	5	6	B	BB	12	14	16	18	20	22	24
4	$2 80	2.90	3.10	3.30	3.70	4.10	4.50	..	.	.	.	...	.....
5	2.85	2 95	3 20	3.40	3 85	4.30	4.75	..	.	. ..	. ..	...	.....
6	2 90	3 00	3 25	3.50	4 00	4.50	5 00	.	.		.	....	. ...
7	2.95	3.05	3 35	3.60	4 15	4.70	5 25	5.80	.	.	.	. .	.....
8	3 00	3 10	3 40	3.70	4 30	4.90	5 50	6.10	..	....			.....
9	3.10	3 25	3 60	3.90	4 55	5.20	5 85	6.50	..	..			. . .
10	3 25	3 40	3 75	4.10	4 80	5.50	6 20	6 90	7 60	.			.
11	3.50	3 70	4 10	4.60	5.30	6.10	6 90	7.70	8 50	..	. ..		
12	3.75	4.00	4 45	4.90	5.80	6 70	7 60	8.50	9 40	10 30	. ..	.	.. .
13	. ..	4.30	4 80	5.30	6 30	7.30	8 30	9.30	10 30	11 30	.		. .
14	....	4 60	5.15	5.70	6.80	7.90	9 00	10 10	11 20	12 30	13 40	. ..	. ..
15	. ..	4.90	5 50	6.10	7.30	8.50	9 70	10.90	12.10	13.30	14 50	. .	..
16	....	5 20	5 85	6.50	7 80	9.10	10 40	11.70	13 00	14 30	15 60	16.90	.....
17	.	5.50	6.20	6.90	8.30	9.70	11 10	12.50	13 90	15 30	16.70	18 10	....
18	.	5 80	6 55	7.30	8.80	10.30	11 80	13 30	14.80	16 30	17 80	19 30	20 80
19	..	6.10	6 90	7.70	9 30	10.90	12 60	14 10	15.70	17.30	18 90	20 50	22 10
20		6.40	7.25	8.10	9 80	11.50	13 20	14 90	16 60	18.30	20 00	21 70	23 40
22	..	7.00	7.95	8.90	10 80	12.70	14 60	16 50	18 40	20.30	22 20	24.10	26 00
24	..	7.70	8.80	9.90	12 10	14.30	16 60	18 70	20 90	23 10	25 30	27.60	29 70
26	.. .	8 40	9.65	10.90	13.40	15 90	18 40	20 90	23 40	25.90	28 40	30 90	33 40
28	.	9 10	10.50	11.90	14 70	17.50	20 30	23 10	25 90	28 70	31 50	34.30	37 10
30	....	9 80	11.35	12.90	16 00	19.10	22 20	25 30	28 40	31 50	34 60	37 70	40 80
32	.. .	10 50	12.20	13 90	17 30	20 70	24.10	27.50	30 90	34 30	37 70	41 10	44.50
34	.. .	11 30	13 15	15 00	18 70	22 40	26 10	29 80	33 50	37 20	40 90	44 60	48 30
36	. .	12.10	14 10	16 10	20 10	24.10	28 10	32.10	36 10	40 10	44 10	48 10	52.10
38	....	....	. ...	17 20	21.50	25 80	30 10	34.40	38 70	43 00	47 30	51.60	55.90
40	...	..	. ...	18 30	22.90	27 50	32 10	36.70	41 30	45.90	50 50	55 10	59.70
42	.	.	....	19 60	24.60	29 50	34 60	39.60	44 60	49 60	54 60	59 60	64.60
44			. ..	20 90	26 30	31 70	37 10	42 50	47.90	53 30	58 70	64 10	69.50
46	.	. ..	.....	22 30	28 10	33 90	39 70	45 50	51.30	57.10	62 90	68 70	74.50
48			...	23 80	30 00	36 20	42 40	48 60	54.80	61.00	67 20	73 40	79.60
50		..	.....	25 40	32 00	38.60	45 20	51 80	58 40	65.00	71.60	78 20	84 80
52	..	. ..	... .	27 10	34 10	41.10	48 10	55 10	62 10	69.10	76.10	83 10	90 10
54	...	.. .	.....	28 90	36 30	43.70	51 10	58 50	65 90	73.30	80.70	88 10	95.50
56	..	.	.....	30 80	38 60	46.40	54 20	62 00	69 80	77 60	85.40	93 20	101 00
58	.. .		. ...	32 80	41 00	49.20	57 40	65 60	73 80	82 00	90.20	98 40	106.60
60	...	. .	....	34 90	43 50	52.10	60 70	69 30	77 90	86 50	95.10	103 70	112.30
62	....	.. .	..	37 10	46 10	55.10	64 10	73 10	82 10	91 10	100.10	109 10	118.10
64	..	.	..	39.40	48.80	58 20	67 60	77 00	86 40	95 80	105.20	114 60	124 00
66	..	.	.	41 90	51 80	61 70	71 60	81.50	91 40	101 30	111.20	121 10	131.00
68		.	. .	44 50	54 90	65 30	75 70	86 10	96 50	106 90	117 30	127 70	138.10
70		.	.	47 20	58 10	69 00	79 90	90 80	101 70	112 60	123 50	134 40	145 30
72		.	...	50 00	61.40	72 80	84 20	95.60	107 00	118 40	129.80	141 20	152.60
78	.	. ..	.....	. ..	71 90	84.80	97 70	110 60	123 50	136 40	149 30	162 20	175.10
84	.	.		. ..	83.30	97.70	112 10	126 50	140 90	155.30	169.70	184 10	198.50
90		.	.	. . .	95 60	111 50	127 40	143 30	159 20	175 10	191.00	206 90	222.80
96	..	. .	..	.. .	109 00	126 50	144 00	161 50	179 00	196 50	214 00	231 50	249.00
102			.		123 70	143 00	162 30	181 60	201 90	220 20	239 50	258 80	278 10
108			..		139 30	160 40	181 50	202 60	223 70	244 80	265 90	287 00	308.10
114	.		.	...	155 80	178.70	201 60	224 50	247 40	270 30	293 20	316 10	339 00
120			.	..	173 20	197.90	222 60	247 30	272 00	296 70	321 40	346 10	370 80

WEIGHT OF COMMON SIZES OF "B" AND "C"

Face In.	Diam. In.	3	4	5	6	7	8	9	10	11	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54
3		1	1½	1⅝	2⅛	3⅛	4⅛	⅝	.⅛	9½	.2	13	16	16	20	25	27	28														
4		1⅜	2⅝	3⅛	4⅝	7⅛	8⅝	.⅛	8½	11	12⅜	16	19	20	23	29	32	34	35	35	44	48	51	3	54	56	59					
5		2	3⅛	4	6⅛	8⅛	11	1⅛	1⅛	16	19	23	23	29	31	41	44	48	48	50	61	62	66	68	70	73	33	87	110	124		
6		2	3⅛	5	6⅛	8½	11	1⅛	1⅛	16	19	23	23	29	31	41	44	48	48	50	61	62	66	68	70	73	33	87	110	124		
7		2	3⅛	5	6⅛	8½	11	1⅛	1⅛	16	19	23	23	29	31	41	44	48	48	50	61	62	66	68	70	73	33	87	110	124		
8		2	3⅛	5	6⅛	8½	11	1⅛	1⅛	16	19	23	23	29	31	41	44	48	48	50	61	62	66	68	70	73	33	87	110	124		
9		2	3⅛	5	6⅛	8½	11	1⅛	1⅛	16	19	23	23	29	31	41	44	48	48	50	61	62	66	68	70	73	33	87	110	124		
10		2	3⅛	5	6⅛	8½	11	1⅛	1⅛	16	19	23	23	29	31	41	44	48	48	50	61	62	66	68	70	73	33	87	110	124		
11		2	3⅛	5	6⅛	8½	11	1⅛	1⅛	16	19	23	23	29	31	41	44	48	48	50	61	62	66	68	70	73	33	87	110	124		
12		2	3⅛	5	6⅛	8½	11	1⅛	1⅛	16	19	23	23	29	31	41	44	48	48	50	61	62	66	68	70	73	33	87	110	124		
13		2	3⅛	5	6⅛	8½	11	1⅛	1⅛	16	19	23	23	29	31	41	44	48	48	50	61	62	66	68	70	73	33	87	110	124		
14		2	3⅛	5	6⅛	8½	11	1⅛	1⅛	16	19	23	23	29	31	41	44	48	48	50	61	62	66	68	70	73	33	87	110	124		
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We can Furnish from Factory Extra Large and Heavy Pulleys for large Driving Pulleys, Dynamos, Trip Hammers, etc

BELT OIL AND DRESSING

POST BELT OIL *Per Gallon

Renders Leather Belts Water Proof and Rot Proof, not affected by Heat, Cold or Gas, Prevents Slipping and Gumming and Preserves the Leather; prevents Expansion and Contraction, will not Become Rancid; Belts may be run in Water at one end and a Hot Room at the other, and still be Soft, Dry and Pliable; Warranted not to start Glue Laps; in 1, 2 and 5 Gallon Cans.....$3.00

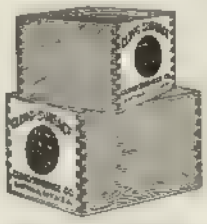
Weight 8 Lbs. per Gallon

BELT DRESSING

For Leather, Rubber or Cotton; Solid Stick Size 2x8 in.; Convenient Form; prevents Slipping, increases the power of the Belt; Cut off about 1 in. of the paper case and move the Bar across and against the Pulley Side of the Belt.

	DIXON *Per Pound
One Pound Stick	$0.60
BULL DOG	
One Pound Stick	.60

BELT DRESSING



CLING-SURFACE

Per Pound

For Leather, Rubber and Cotton Belts, Camel Hair or Rope; Fills and Preserves; Makes and Keeps a Belt or Rope Clean and Elastic, Doubling its Life, Besides Absolutely preventing Slipping or Running off.....$1.00

Apply hot, a little at a time, to the back of the belt, with a common paint brush; do it again and again until the belt is filled.

10 Lbs. in a Can

SIKES IDEAL

For Leather Belting Running in Damp or Exposed Places, or which has Become Hard and Dry; Keeps a Belting Soft and Pliable, Preserves the Leather and Renders it Waterproof

*Per Gallon

1 Gal. Cans $3.00

Weight 10 Lbs. per Gallon

FIBRE ROPE DRESSING

Preserve Your Ropes.
BLACK DIAMOND
TRADE MARK
REG IN U S PAT OFFICE
ROPE DRESSING.
Preserves the Rope and Protects it against Wear and Weather.
Prolongs Life of the Rope and Reduces the Friction.
Keeps Strands of the Rope from Burning and Cutting.
Overcomes the Trouble Caused by Ropes Shrinking and Stretching in Wet and Dry Weather.

Per Can

No. 35—Black Diamond, Paste Form; 5 Pound Cans $2.50

Open Stock

We can furnish this Dressing in 10, 15, 25, 50 and 100 Pound Cans from Factory.

LEATHER BELT CEMENT

SIKES

For Leather Belts

Per Pound

Sikes—One Pound Cans, ready to apply when Heated..$1.50

Full Directions for Use with Each Can

Open Stock

AQUA

For Leather Belts Running in Damp Places

Per Can

One Pint Cans; Weight 10 Lbs. per Case.....$ 1.50

Six Cans in a Case

One Gallon Cans; Weight 12 Lbs per Can..... 10.00

Carried at Portland Only

RUBBER BELT CEMENT

HARTFORD, AIR DRYING

For Rubber Belts, Hose, etc.

Per Can

One Pint Cans; Weight 1¾ Lbs. $1.50

One Quart Cans; Weight 2¼ Lbs 3.00

Clean parts thoroughly. Apply One Coat, let it evaporate half an hour, add second coat and let evaporate half an hour, then press parts firmly together.

BELT MAKERS' GLUE POTS

Each

Capacity Two Quarts, Height 16 in., Diam. of Base 7½ in.; Galvanized Iron Hood; Tin Base, Heavy Tin Pot with Copper Bottom; 1½ in. Wick; Tin and Mica Chimney; Cost of Burning about 3 cents per day $3.00

Open Stock; Weight 3½ Lbs. Each

BELT MAKERS' GLUE BRUSHES

*Each

No. 40—Round, Diam. 1⅛ in., 3½ in. Chinese Black Bristles, Plain Hardwood Handle, Heavy Nickel Plated Ferrule, Length Over-all 11½ in.....$1.50

Half Dozen in a Box; Weight 5½ Lbs. per Dozen

No. 50—Round, Diam. 2 in., 4 in. Gray Bristles, Plain Hardwood Handle, Heavy Copper Ferrule; Length Over-all 12 in..... 3.00

Quarter Dozen in a Box; Weight 8 Lbs. per Dozen

"GUNN" FLAT TOP DESKS OR TABLES

Top is 1¼ Inches Thick, Five-Ply Built-up Stock. Drawers 18 in. Long, Inside Dove-tailed Front and Back, Three-Ply Drawer Bottoms. Framed in; Lemon Brass Pulls

QUARTERED OAK

	Each
No. 460-OT—Size of Top 34x60 in.; Two Drawers; 3 in. Legs, Mitered; Shipping Weight 155 Lbs.	$40.00
No. 466-OT—Size of Top 34x66 in.; Two Drawers; 3 in. Legs, Mitered; Shipping Weight 175 Lbs.	43.00

BIRCH, IMITATION MAHOGANY
With Genuine Mahogany Top

	Each
No. 460-OTB—Size of Top 34x60 in.; Two Drawers; 3 in. Legs, Mitered; Shipping Weight 155 Lbs.	$40 00
No. 466-OTB—Size of Top 34x66 in.; Two Drawers; 3 in. Legs, Mitered; Shipping Weight 175 Lbs.	43.00

BOOKKEEPERS' DESKS

☞ Cash Drawer is not included unless so ordered at $1.00 Net Extra
Plain Oak, Gloss Finish; Strongly Made and Braced; Made in Three Standard Lengths

	Each
No. 20 —Length 60 in., Depth 34 in., Height 44 in.; Weight 200 Lbs.	$29 00
No. 21 —Length 72 in., Depth 34 in., Height 44 in.; Weight 210 Lbs.	31.00
No. 21A—Length 96 in., Depth 34 in., Height 44 in.; Weight 225 Lbs.	40.00

OFFICE CHAIRS

Rotary, with Screw Adjustment

WITH ARM RESTS

Each

No. 2158-8—Wood Saddle Seat, Quartered Oak, Veneered Back, Golden Oak, Gloss or Dull Finish; Size of Seat 18½x19½ in.; Height of Back 18 in. $12.00

Weight 35 Lbs. Each

WITH ARM RESTS

Each

No. 2908-8—Wood Saddle Seat; Solid Quartered Oak; Golden Oak, Polished or Rubbed Finish; Size of Seat 18½x20 in.; Height of Back 18 in. $16 00

Weight 40 Lbs. Each

WITHOUT ARM RESTS

Each

No. 2054-7—Wood Saddle Seat; Golden Oak, Gloss or Dull Finish; Size of Seat 17½x18½ in.; Height of Back 18 in. $12.00

Weight 35 Lbs. Each

OFFICE CHAIRS — OFFICE STOOLS

ROTARY

Each

No. 2953-7 Wood Seat; Golden Oak Finish; Size of Seat 16x17 in.; Height of Back 20½ in. $7.50

Weight 25 Lbs. Each

STATIONARY

Each

No. 2908-8—Wood Saddle Seat; Solid Quartered Oak, Golden Oak, Polished or Rubbed Finish. Size of Seat 18½x20 in.; Height of Back 18 in.... ..... $12 50

Weight 25 Lbs. Each

REVOLVING TOP

Each

No. 258—Solid Oak, Polished Golden Finish, with Adjustable Screw Top; 31 in. High..$9 00

Weight 20 Lbs. Each

Each

No. 66—Wood Seat, Golden Gloss Finish; 33 in High, $2.50

Weight 9 Lbs. Each

HARNESS MAKERS' AWLS

Also used in Lacing Belts, etc.

PLAIN AWLS — Each

No. 1—Length 8½ in., Polished Steel Octagon, Ebony Handle, Brass Ferrule $0 80

Weight 2 Lbs. per Dozen

SHOULDERED AWLS — Each

No. 3—Length 8 in., Polished Steel, Rosewood Handle, Brass Ferrule $0 50

Weight 1½ Lbs. per Dozen

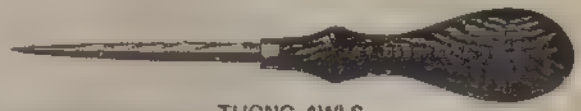
One Dozen in a Box

PAD AND SEAT AWLS — Each

No. 2—Length 7¾ in., Polished Steel, Rosewood Handle; Brass Ferrule $0 40

Weight 1½ Lbs. per Dozen

One Dozen in a Box



THONG AWLS

Length 7 in., Polished Steel; Rosewood Handle; Brass Ferrule; for Collar Work; also Used in Belt Repairing — Each

No. 6R—Riveted Handle $0 60

No. 6 —Not Riveted ..... .40

Weight 1½ Lbs. per Dozen

DRAWING AWLS — Each

No. 5—Length 9 in., Polished Steel; Rosewood Handle; Brass Ferrule; used with a Punch $0.60

Weight 1¾ Lbs. per Dozen

COLLAR AWLS — Each

No. 8—Length 10 in., Polished Steel, Rosewood Handle; Brass Ferrule; used without a Punch $0.60

Weight 1¾ Lbs. per Dozen

One Dozen in a Box

MEYERS LOCK STITCH

The Patent Needle and Parted and Pointed Thread make the Strongest Stitch. It has a groove to contain the thread during full length of the back, preventing any larger portion of the thread from being drawn through. The Parted Thread is drawn through a short portion of their length only. For sewing Tents, awnings, Canvas Goods, etc.

Per Dozen

No. 15—Complete with Spool of waxed Thread and one straight and curved Needle $12 00

One in a Box; Weight ¼ Lb. Each

EXTRA NEEDLES

Per Dozen

No. 16—Straight Needles... $1 20

No. 18—Curved Needles.... 1 20

EXTRA THREAD

Per Dozen Skeins

No. 17—Waxed Thread, 25 yards in Skein ..... $.60

HARNESS MAKERS' AWL HAFTS

For Awl Blades and other Awl Hafts, see Tool Dept.

PATENT

Length 3¾ in.; Round Handle; Socket will take any Size or Style of Awl

A Small Iron Wrench is Included

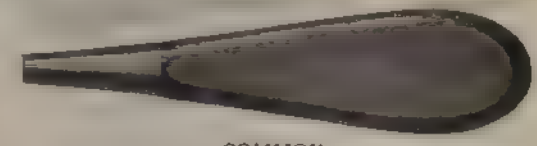
No. 146R—Rosewood, Riveted.... $1 00

No. 146 —Rosewood; not Riveted.. .75

No. 146C—Common White Wood .50

One Dozen in a Box

Weight 2 Lbs. per Dozen



COMMON

Length 4 in., Flat; Plain Edges; Brass Ferrule — Per Dozen

No. 140D —Ebony, Drilled Through... $3.40

No. 140 —Ebony 2 30

No. 140½—Imitation Ebony 1 10

Half Gross in a Box

Weight ¾ Lb. per Dozen

TAPER FERRULE

Length 4 in., Brass Ferrule — Per Dozen

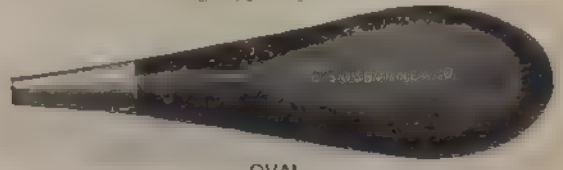
No. 141R—Rosewood $1 30

No. 141B—Black Wood 1 00

No. 141 —Yellow Wood ..... .52

Weight ½ Lb. per Dozen

Half Gross in a Box



OVAL

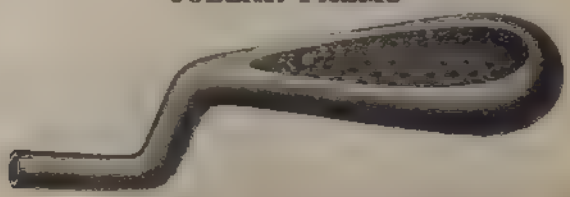
Length 4 in., Brass Ferrule — Per Dozen

No. 141½R—Rosewood $1.90

No. 141½B—Black Wood 1 10

Weight ⅝ Lb. per Dozen

COLLAR PALMS



For Pushing the Needle through the Work — Each

No. 93—Length 4½ in., Iron $0 90

One Dozen in a Box; Weight ¼ Lb. Each

EDGE TRIMMING TOOLS

For Cutting away the Raw Edges of New Strap Work

By Light or Heavy Pressure the Width of Cut can be regulated from $\frac{1}{16}$ to $\frac{1}{8}$ in.

ROUND EDGE

Length 6 in., Polished Steel; Rosewood Handle; Brass Ferrule

	Each
No. 127 —Osborne	$1.50
No. 127G—Gomph	.90

Weight 1¼ Lbs. per Dozen

COMMON EDGE

Length 5½ in., Polished Steel, Rosewood Handle, Brass Ferrule

	Each
No. 125 —Osborne	$0 30
No. 125G—Gomph	.90

Half Dozen in a Box — Weight 1 Lb. per Dozen

FRENCH, SQUARE EDGE

Length 6 in. Polished Steel, Rosewood Handle; Brass Ferrule, Octagon Shank

Schedule of Sizes, in ordering always specify Size Nos. wanted

Size Nos.	0	1	2	3	4	5	6	7	8
Width, In.	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{8}$	$\frac{1}{16}$	$\frac{1}{8}$	$\frac{1}{16}$	$\frac{3}{16}$	$\frac{1}{16}$	$\frac{1}{8}$

STRAIGHT SQUARE EDGE

	Each
No. 132 —Osborne, Sizes 0 to 8	$1 40
No. 132G—Gomph; Sizes 0 to 8	1.00

BENT SQUARE EDGE

	Each
No. 132½ —Osborne; Sizes 0 to 8	$1 40
No. 132½G—Gomph; Sizes 0 to 8	1.50

Half Dozen in a Box; Weight 1¾ Lbs. per Dozen

SADDLERS' CARVING TOOLS

	Each
No. 135—Osborne, Length 6 in., Assorted Widths $\frac{1}{16}$, $\frac{1}{16}$, $\frac{1}{8}$, $\frac{3}{16}$, $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$ and $\frac{1}{2}$ in., Polished Steel, Rosewood Handle, Flat Shank, Brass Ferrule	$0 60

Weight 2 Lbs. per Dozen — Half Dozen in a Box

SADDLERS' V GOUGES

	Each
No. 136—Osborne; Length 6 in., Width at Point $\frac{1}{16}$ in., Polished Steel, Rosewood Handle, Octagon Shank, Brass Ferrule	$1.20

Weight 2 Lbs. per Dozen

PATENT LEATHER TOOLS

For gouging the gum off from Patent Leather before stitching, Length 6 in., Polished Steel, Rosewood Handle, Brass Ferrule

	Each
No. 134 —Osborne	$0 80
No. 134G—Gomph	.90

Weight 1 Lb. per Dozen — Half Dozen in a Box

REIN TRIMMING TOOLS

For Trimming Round Reins, Length 6½ in. Polished Steel, Rosewood Handle, Brass Ferrule

	Each
No 137 —Osborne	$1 00
No. 137G—Gomph	1 00

Weight 1½ Lbs. per Dozen

TICKLERS

For Creasing Edges of Loops and other Small Harness Parts

Schedule of Sizes; Note—Always Specify Size Number Wanted

Size Nos.	0	1	2	3	4
Width of Blade, In.	$\frac{1}{16}$	$\frac{3}{16}$	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{5}{16}$

SINGLE

For Common Creasing

	Each
No. 13—Osborne, Length 6 in., Malleable Iron Polished, Rosewood Handle, Octagon Shank, Brass Ferrule, Sizes 0, 1, 2, 3, and 4	$0 90

Weight 2 Lbs. per Dozen — Half Dozen in a Box

	Each
No 13G—Gomph; Length 5¾ in., Polished Steel; Rosewood Handle; Octagon Shank, Brass Ferrule Sizes 0, 1, 2, 3 and 4	$0 90

Weight 1¼ Lbs. per Dozen

BEVEL

For Fancy Creasing

	Each
No. 14—Osborne; Length 6 in., Polished Steel, Rosewood Handle; Square Shank; Brass Ferrule Sizes 0, 1, 2, 3 and 4	$0 90

Weight 2 Lbs. per Dozen

	Each
No 14G—Gomph; Length 5¾ in., Polished Steel; Rosewood Handle; Octagon Shank, Brass Ferrule Sizes 0, 1, 2, 3 and 4	$0 90

Weight 1¼ Lbs. per Dozen

Half Dozen in a Box

HARRINGTON AND RICHARDSON REVOLVERS

DOUBLE ACTION

Cartridges for H. & R. Revolvers

22 Cal. { 22 Short Rim Fire
22 Long Rim Fire
22 S. & W. Long Rim Fire

32 Cal. 32 S. & W. Center Fire

38 Cal. { 38 S. & W.
38 Colt New Police

AUTOMATIC DOUBLE ACTION

Automatic Shell Ejector; Rubber Stock

HAMMER

	Each
22 Cal. Rim Fire; Holds 7 Shots; Blued Finish	
No. 50—3 in. Barrel; Weight 13 Ozs. Each	$6 00
No. 52—4 in. Barrel; Weight 14 Ozs. Each	6 25
32 S. & W. Cal. Center Fire, Holds 5 Shots; Blued Finish	
No. 54—3 in. Barrel, Weight 12 Ozs. Each	6 00
No. 56—4 in. Barrel, Weight 13 Ozs. Each	6 25
38 S. & W. Cal. Center Fire, Holds 5 Shots, Blued Finish	
No. 58—3¼ in. Barrel, Weight 15 Ozs. Each	6 00
No. 60—4 in. Barrel; Weight 16 Ozs. Each	6 25
22 Cal. Rim Fire, Holds 7 Shots, Nickeled Finish	
No. 51—3 in. Barrel, Weight 13 Ozs. Each	5 75
No. 53—4 in. Barrel; Weight 14 Ozs. Each	6 00
32 S. & W. Cal. Center Fire, Holds 5 Shots, Nickeled Finish	
No. 55—3 in. Barrel, Weight 12 Ozs. Each	5 75
No. 57—4 in. Barrel, Weight 13 Ozs. Each	6 00
38 S. & W. Cal. Center Fire; Holds 5 Shots; Nickeled Finish	
No. 59—3¼ in. Barrel, Weight 15 Ozs. Each	5 75
No. 61—4 in. Barrel; Weight 16 Ozs. Each	6 00

HAMMERLESS

	Each
22 Cal. Rim Fire, Holds 7 Shots, Blued Finish	
No. 62—3 in. Barrel; Weight 13 Ozs. Each	$6 50
No. 64—4 in. Barrel, Weight 14 Ozs. Each	6 75
32 S. & W. Cal. Center Fire, Holds 5 Shots, Blued Finish	
No. 66—3 in. Barrel; Weight 13 Ozs. Each	6 50
No. 68—4 in. Barrel, Weight 14 Ozs. Each	6 75
38 S. & W. Cal. Center Fire, Holds 5 Shots, Blued Finish	
No. 70—3 in. Barrel, Weight 17 Ozs. Each	6 50
No. 72—4 in. Barrel; Weight 18 Ozs. Each	6 75
22 Cal. Rim Fire, Holds 7 Shots, Nickeled Finish	
No. 63—3 in. Barrel, Weight 13 Ozs. Each	6 25
No. 65—4 in. Barrel; Weight 14 Ozs. Each	6 50
32 S. & W. Cal. Center Fire, Holds 5 Shots, Nickeled Finish	
No. 67—3 in. Barrel; Weight 13 Ozs. Each	6 25
No. 69—4 in. Barrel; Weight 14 Ozs. Each	6 50
38 S. & W. Cal. Center Fire; Holds 5 Shots; Nickeled Finish	
No. 71—3 in. Barrel; Weight 15 Ozs. Each	6 25
No. 73—4 in. Barrel; Weight 16 Ozs. Each	6 50

BICYCLE AUTOMATIC DOUBLE ACTION

Automatic Shell Ejector, Rubber Stock; 2 in. Stock

HAMMER

2 in. Barrel

	Each
No. 81—22 Cal. Rim Fire; Holds 7 Shots; Nickeled Finish, Weight 12 Ozs. Each	$5 75
No. 83—32 S. & W. Cal. C. F.; Holds 5 Shots; Nickeled Finish; Weight 11 Ozs. Each	5 75

HAMMERLESS

2 in. Barrel

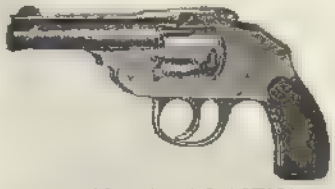
	Each
No. 85—22 Cal. Rim Fire, Holds 7 Shots, Nickeled Finish, Weight 12 Ozs. Each	$6 50
No. 87—32 S. & W. Cal. C. F.; Holds 5 Shots; Nickeled Finish; Weight 12 Ozs. Each	6 75

For Component Parts of H. & R. Revolvers, see page 2083

U. S. REVOLVER CO. REVOLVERS

Barrel is Drop Forged from Open Hearth Steel, accurately Bored, reamed and rifled; all working parts are forged or milled and Tempered and hardened; action is smooth and rapid.

Hinged Frame, Automatic Ejector, Rubber Stock



HAMMER, DOUBLE ACTION

	Each
22 Rim Fire Cal.; Holds 7 Shots; Nickeled Finish	
No. 90—3 in. Barrel, Weight 12¾ Ozs., Each	$5 50
32 S. & W. Cal. C. F.; Holds 5 Shots; Nickeled Finish	
No. 91—3 in. Barrel, Weight 12¾ Ozs. Each	5 50
38 S. & W. Cal., C. F.; Holds 5 Shots; Nickeled Finish	
No. 93—3¼ in. Barrel; Weight 18 Ozs. Each	5 50
22 Rim Fire Cal.; Holds 7 Shots; Blued Finish	
No. 99—3 in. Barrel; Weight 12¾ Ozs. Each	6.00
32 S. & W. Cal. C. F.; Holds 5 Shots; Blued Finish	
No. 92—3 in. Barrel; Weight 12¾ Ozs. Each	6.00
38 S. & W. Cal. C. F. Holds 5 Shots, Blued Finish	
No. 94—3¼ in. Barrel, Weight 18 Ozs. Each	6 00

HAMMERLESS, DOUBLE ACTION

	Each
32 S. & W. Cal. C. F.; Holds 5 Shots; Nickeled Finish	
No. 95—3 in. Barrel, Weight 12¾ Ozs. Each	$6 00
38 S. & W. Cal. C. F.; Holds 5 Shots; Nickeled Finish	
No. 97—3¼ in. Barrel; Weight 18 Ozs. Each	6 00
32 S. & W. Cal. C. F. Holds 5 Shots; Blued Finish	
No. 96—3 in. Barrel; Weight 12¾ Ozs. Each	6 50
38 S. & W. Cal. C. F.; Holds 5 Shots, Blued Finish	
No. 98—3¼ in. Barrel, Weight 18 Ozs. Each	6 50

All Above, One in a Box

For Cleaning Brushes, see page 3031; Ammunition, 3008–3018

REVOLVERS

Solid Small Frame, Rubber Stock; Nickel Plated Finish

DOUBLE ACTION

Each

No. 822—Young America, 22 Caliber, R. F.; 2 in. Barrel; Holds 7 Shots; Weight 8½ oz. Each $3 00
This Caliber takes 22 Short or Long Cartridges

No. 832—Bull Dog, 32 Short Caliber; Rim Fire; 2 in. Barrel; Holds 5 Shots, Weight 9½ oz. Each 3.00

MODEL 1905, DOUBLE ACTION

Each

No. 532DA—32 S. & W. Caliber, Center Fire; 2½ in. Barrel; Holds 5 Shots; Weight 11 oz. Each $3.00

MODEL 1904, DOUBLE ACTION

Solid Frame, Rubber Stock, Nickel Plated Finish

Each

No. 432—32 S. & W. Caliber, Center Fire; 2½ in. Barrel; Holds 6 Shots; Weight 16 Oz. Each $3.00
This Caliber will also take 32 S. & W. Long Cartridges

No. 438—38 S. & W. Caliber, Center Fire; 2½ in. Barrel; Holds 5 Shots; Weight 16 Oz. Each 3.00

For Component Parts, see page 2983

KEY FILING MACHINES OR JIGS

For Janitors, Engineers, Mechanics, Repair Shops, Locksmiths and anybody who has work of this kind to do

Yale and Sargent Keys are inserted from the Right Side, other Kinds are inserted from the Left Side

HARRISON M. I. P.

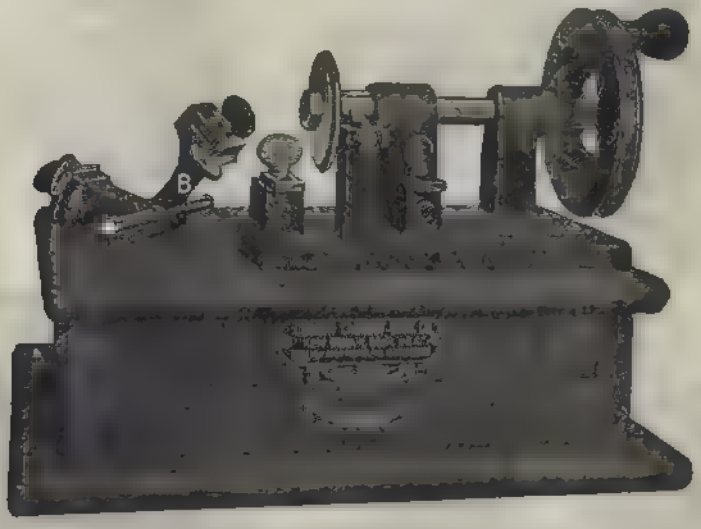
With this Machine it is possible to duplicate any Pin Tumbler Key, either Yale, Sargent, Corbin, Lockwood, Russell Erwin, Norwalk, Reading or others; the Improved Clamp secures a firm hold on every make of Key, especially those having several corrugations, where the Bit has little purchase and Notch has to be deeply seated; when filing it also holds the Blank rigidly at a perfect angle.

No. M. I. P.—Made of Steel, Bright Finish, Size 2¾x1½ in.; Japanned Clamp; the Gauge Pins are especially Milled and Case Hardened; Complete with Improved Clamp, One Angular and One Round Filing Guide $6.00
One in a Box; Weight ¾ Lb. Each

Per Dozen

No. 123—Files; 6 in.; For Use with Above Machine..... $1.25
One Dozen in a Box

AUTOMATIC KEY DUPLICATING MACHINES AND ASSORTED KEY BLANKS



Per Assortment

Assortment No. 9101—Contains above Machine and One Gross Assorted Pin Tumbler Blanks; The Machine is 9x6x6½ inches High, and is Mounted on a Handsomely Finished Hardwood Cabinet, containing two Drawers for Locksmith's Repair Tools and Assorted Blanks; Can be operated by either Hand or Belt; Full Directions for operating sent with each Machine, Cuts Keys for all Standard Cylinder Locks; Weight 75 Lbs. per Assortment..... $30.00

AUTOMATIC KEY DUPLICATING MACHINES WITHOUT KEY BLANKS

Each

No. 91—Machine only, no Keys, as described and Illustrated above $25.00
Weight 50 Lbs. Each

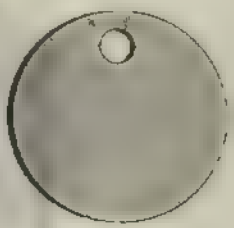
BRASS BAGGAGE AND KEY CHECKS AND TAGS

For Key Rings and Chains, Hotel or Room Keys; Baggage, Parcel, Hat, Coat and Umbrella Check Rooms; Dog Tags, Keeping Time for Large Number of Employes, Marking Tools and Various Numbering Systems, Etc., Etc.

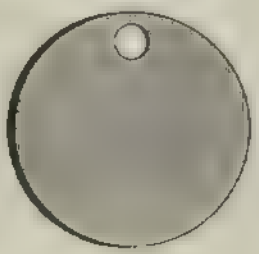
Prices are per Pound for Blank Tags without Lettering

No. 150A
175 in a Pound

No. 150B
88 in a Pound



No. 150C
64 in a Pound



No. 150D
60 in a Pound

No. 150E
55 in a Pound

No. 150F
63 in a Pound

No. 150H
55 in a Pound

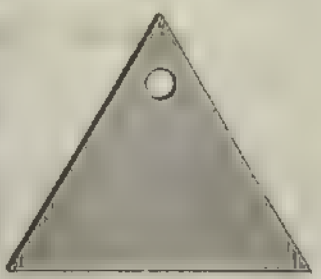
No. 150K
34 in a Pound

No. 150L
350 in a Pound

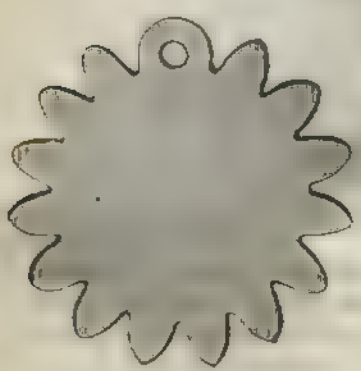
No. 150M
107 in a Pound

No. 150N
96 in a Pound

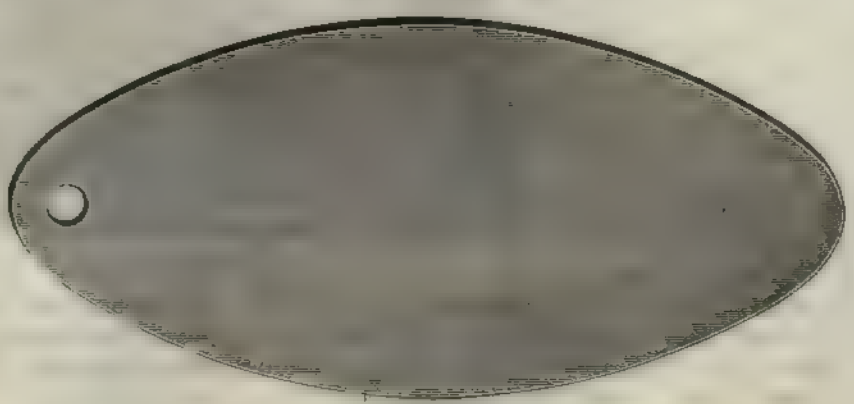
No. 150P
68 in a Pound



No. 150R
56 in a Pound



No. 150S
25 in a Pound



No. 150T
8 in a Pound

	Per Lb.
All Numbers	$1.60

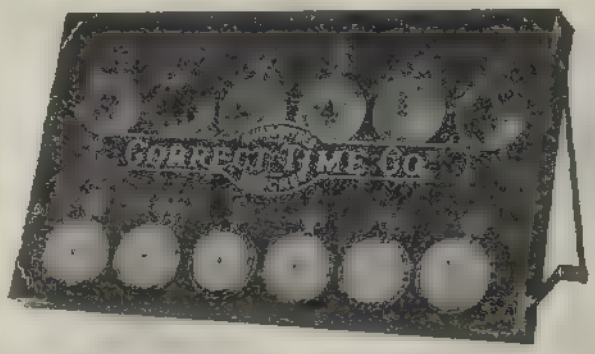
Can be Lettered or Stamped as requested on Special or Direct Orders

Weights Given are Approximate Only

LEADER WATCH ASSORTMENT

Watches to Retail at $1.00 1.25 1 50 2.00 and 2.50 Each; Every Watch Unconditionally Guaranteed

The Case Is Green Plush Lined and will hold one dozen Watches Each Watch is tagged with Retail Price, This is a special assortment gotten up to introduce some of the best sellers in our line of Popular Watches; The quantities are not large of any one pattern, giving the dealer a good opportunity to find out which will prove the best sellers and not have an overstock



The Case is made so it can be laid flat in the Show Case or stood up on the Counter. It has Folding Arms, which makes it possible for it to be used either way; It has two catches in the back so if displayed on Show Case, it eliminates all chances of same being opened up by any one except those behind the Counter.

Per Assortment

No. 716—Assortment Contains 36 Watches Complete with Glass Covered, Metal Corner Mahogany Finished Display Case, 14 in. Long, 8 in. Wide and 1½ in. Deep, Green Plush Lined $57 00

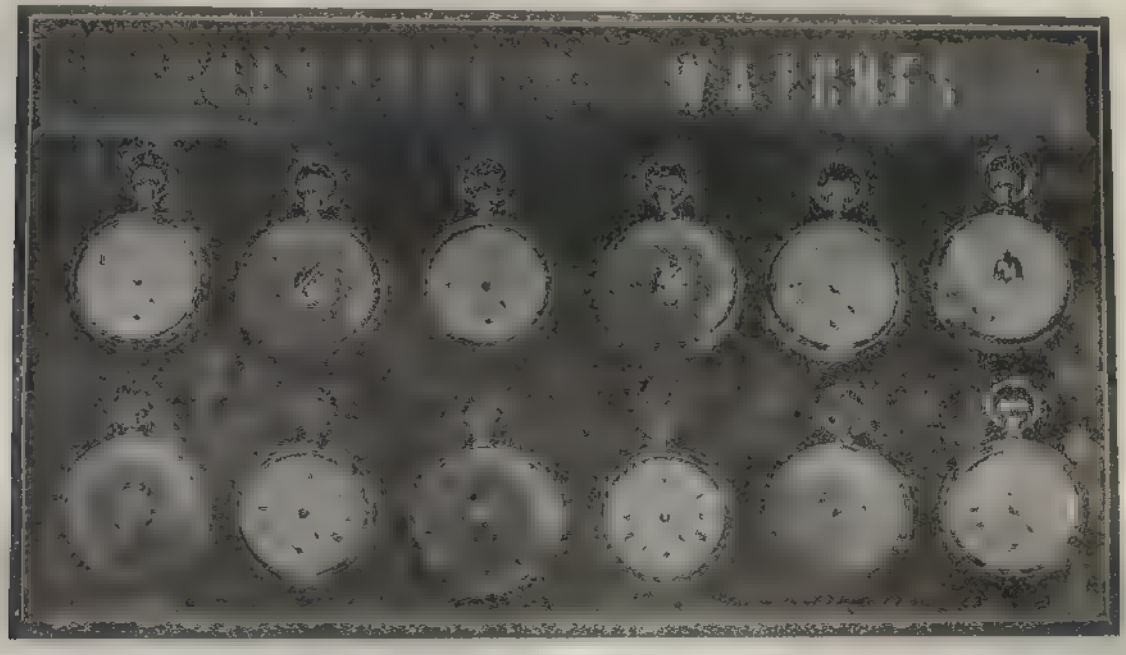
Weight 3½ Lbs. per Assortment

Contents of Leader Assortment

Quantity		Retail Each	Total Retail
2 Only No. 100	Skookum Watches, Nickel Finish..	$1 00	$2.00
2 Only No. 101	Skookum Watches, Gun Meta. Finish	1 00	2.00
2 Only No 102	Skookum Watches, Gilt Finish . ..	1.00	2 00
2 Only No 103	Hartford Watches, Nickel Finish ...	1 25	2 50
2 Only No 105	Hartford Watches, Gun Metal Finish	1.25	2 50
2 Only No 107	Hartford Watches, Gilt Finish	1.25	2 50
2 Only No. 115	Gold Bond Watches, Nickel Finish ..	1.50	3.00
2 Only No 118	Gold Bond Watches, Gun Metal Fin	1.50	3 00
2 Only No. 121	Gold Bond Watches, Gilt Finish .	1 50	3.00
2 Only No 109	Ford Watches, Nickel Finish	1.25	2 50
2 Only No 112	Ford Watches, Gun Metal Finish....	1.25	2.50
2 Only No. 114	Ford Watches, Gilt Finish	1.25	2.50
2 Only No. 124	C. T. C. Watches, Nickel Finish ...	$2.00	$4.00
2 Only No. 126	C T C Watches, Gun Metal Finish.	2.00	4.00
2 Only No 128	C T C Watches, Gilt Finish	2.00	4.00
1 Only No. 136	Martha Washington Watches, Nic. Fin	2.50	2.50
1 Only No. 138	Martha Washington Watches G M.	2.50	2 50
1 Only No. 140	Martha Washington Watches, Gilt Fin	2.50	2 50
1 Only No. 142	Geo Washington Watches, Nickel Fin.	2.50	2.50
1 Only No 144	Geo Washington Watches, G M Finish	2 50	2.50
1 Only No. 146	Geo Washington Watches, Gilt Finish.	2.50	2.50
	Total Retail Price		$57 00

NEW IDEA WATCH ASSORTMENT

We Do Not Break Assortments



The Hartford Watch Assortment Consists of the following:

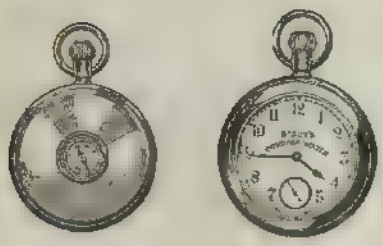
3 Nickel, Plain Back, Watches, Assorted Arabic and Roman Dials
3 Nickel, Engine Turned Back Watches, Movement Plate Damaskeened, Case Snap Back and Bezel
3 Gun Metal Plain Back Watches, 16 Size, Stem Wind and Stem Set
3 Gilt, Engraved Back, Watches, Guaranteed for One (1) Year
A beautiful Silk Plush Lined Placard equipped with an Easel Back for Counter Display and Rings for Wall Display furnished free with each Assortment

Per Assortment

No. 108—Hartford Watch Assortment, Size 9x15 in. $19.20

Weight 2¾ Lbs.

WATCHES



Front Back

SCOUTS' COMPASS WATCHES

For Boy Scouts, Hunters, Fishermen, Automobilists, Travelers, Sailors, or any one who wants correct time and direction; Guaranteed for One Year.

Each

No. 76—Size 16; Nickel Plated; Stem Wind and Stem Set.....$1.25

One in a Box

PEDOMETERS

Registers up to 100 Miles

The Dial is similar to a Watch; the Figures represent the miles traveled; the space between each number is divided into ¼, ½ and ¾ of a mile; the Pendulum within swings to the rythm of the stride, ticking off the steps as a watch ticks off the Seconds and the Hand points out the number of miles walked; can be regulated to suit any length of step.

Each

No. 98—Nickel Plated $1.00

One in a Box

HIKEMETERS

Front Back

Registers 100 Miles or any Fraction Thereof; The Hikemeter Measures the Distance You Walk; the Compass gives the Direction; Can be Set to accommodate any length of step; Accurate and Reliable; Slips into Pocket, Belt or Garter.

Each

No. 151—Hikemeter; Nickel Plated...$2.00

One in a Box

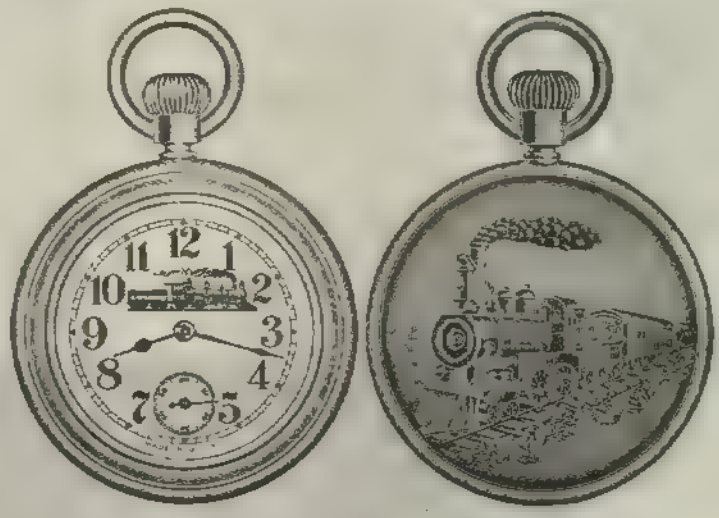
RUNSWELL

Gentlemen's Watch, 16 Size, Open Face; Stem Wind and Stem Set, Plain Case, Snap Back and Bezel; This Watch is carefully made and tested for accuracy before leaving the Factory.

Each

No .152—Nickel Plated $1.25

One in a Box



Front Back

RAILROAD SPECIAL

Gentlemen's Watch, 16 Size, Open Face; Stem Wind and Stem Set; Railroad Train engraved on Back; Engine and Tender stamped on Face; Snap Back and Bezel; Plain Figures, Sunken Second Hand; Tested for Accuracy before leaving Factory.

Each

No. 154—Nickel Plated $1.50

One in a Box

MONTE CARLO

The Dial has small holes in each space that are numbered; a small Ball lies loose on the Dial; by pressing the stem at the top of the Watch the Dial revolves round a number of times; when it stops the Ball will lodge itself in one of the holes. The game is to name the number the Ball will stop opposite.

Each

The Rollete—Nickel Plated Case Size 1½ in. Diam.....$1.25

Packed One in a Box, with Directions

Weight 2 Oz. Each

NEW PARLOR GAME

The Dial has Eight Figures of Racing Horses; by pressing the stem at the top of the Watch the Horses will revolve round a number of times; when they stop the Winner will appear in space marked at the bottom. Name the Winner.

Each

The Saratoga—Nickel Plated Case, Size 1½ in. Diam.....$1.25

Packed One in a Box, with Directions

Weight 2 Oz. Each

HEAD LIGHTS

These Lights can be furnished with Side Numbers, when so ordered

Best results are obtained by use of Headlight Kerosene Oil, see Mining Dept.

For Acetylene Shovel or Dredge Lights, see Builders Hardware Dept.

Foot Piece

Bracket for 10 and 11 in. Stack

No. 100—LOCOMOTIVE

Heavy Steel Body, Finished in Black; XXX Tin Fount; Powerful, Silver Plated Copper or Aluminum Reflector, No. 2 Nickel Plated Burner; the 12 in. Size takes a ¾ in. Wick, in an Argand Burner and No. 1 Chimney; the larger Sizes use our Headlight Wick, 1¼ in. in Diam., and Size 2 Headlight Chimney, 2¾ in. Base, 10 in. High the 12 in. and 14 in. Sizes are adapted for Narrow Gauge Dinkies or Traction Engines.

Reflector, In.	12	14	16	18	20
Height, In.	24¾	28	31	31	33
Base, In.	16x5½	17½x6	20½x8	22x10	21½x11¼
Fount Holds, Qts.	1¾	3	4	4	4
Burns, Hours	11	13	15	15	15
Weight Each, Lbs.	26	50	60	75	95
Each	$24 00	30 00	35.00	40.00	50.00

One in a Box

TRACTION ENGINE

Especially adapted for Traction Engines, Cable or Motor Cars; gives Strong, Brilliant Light; Draught is so arranged that the Flame will not smoke nor blow out in high winds nor jar out when passing over rough roads. Bracket shown on top of back is only used on Motor Cars.

Each

No. 150—10 in. Reflector, made of Copper, Silver Plated; Varnished Black, Heavy Sheet Steel Body, XXX Tin Fount; Height 21¾ in., Base 12x9½ in.; takes Moehring Circular Wick, Our No. M; Special Motor Burner; takes No. 87 Chimney, 1⅛ in. Base, 10 in. High. Fount holds 2 Pints; Burns 20 Hours with One Filling. Complete with Bracket and Foot Piece; Weight 32 Lbs. $13 60

One in a Case; Weight 32 Lbs.

SIGNAL LIGHTS

TAIL LAMPS

For Rear Coach or Caboose Signals

Heavy Sheet Steel Body, Covered with a Coating of Tin and Japanned; Square Shaped Oil Pot drawn from Two Pieces of Steel, Air-tight Sliding Door for removing Oil Pot, cleaning Lenses or lighting. Outside Wick Raiser and Peep Hole for adjusting Flame. Adjustable Brackets for changing position of Lenses

Takes No. 1 Signal Burner with 4½ in. Shaft; ⅝ in. Wick, 5⅜ in. Lenses; Height 15 in., Base 7 in.; Holds 12 Oz. Oil, Burns 22 Hours at one filling of Kerosene Oil.

Nos.	832	833	834
Lights	2	3	4
Wt. Lbs.	17	19	21
Each	$6.00	7.50	10.00

With non-Sweating Ventilation, consisting of a Perforated Cone inside of which is a Solid Cone. The air comes in at the Top of the Lamp and is distributed through the holes passing down the outside of the Solid Cone to the Fount, and from there it feeds the flame,

passes up through the Solid Cone and out of the top of the Lamp This prevents the gathering of moisture, frost or ice on the inside of the Lamp Body or Lenses, adding life to the Lamp and insuring the full signal power of the Lenses at all times

SWITCH LAMPS

For use at Switches, Railroad Crossings, Bridge Approaches, etc.

Made up of two pieces of Heavy Sheet Steel, securely bolted together; Drawn Sheet Steel Oil Pot; Fork Sockets have Springs to relieve jar; Compact, light, durable

Each

No. 634—With Four 5⅜ in. Lenses; Height 13 in., Base 5½ in.; No. 1 Signal Burner; ⅝ in. Wick; Holds 9 oz. Oil, Burns 16 Hours at one Filling of Kerosene Oil. $10.00

No. 632—With Two 4½ in. and Two 4⅛ in. Lenses, otherwise same as Above $10.00

Weight 17½ Lbs. Each

Constructed of Heavy Sheet Steel Throughout; Top is attached to Body by a Hinge Hasp; the Base is riveted to the Bottom and fitted with a removable Cast Iron Socket, with Spring to relieve the jar of passing trains; the Fount is made of XX drawn Tin and is removable.

Each

No. 169—With Four 4½ in. Lenses; Height 15¾ in., Base 6½ in.; No. 1 Signal Burner, ⅝ in. Wick, holds 16 Oz. Oil, Burns 30 Hours with one Filling of Kerosene. $10.00

Weight 17 Lbs. Each

Note—Any Color Lenses furnished as desired; Specify Colors Wanted

Best results will be obtained by using 150° Kerosene in above Lamps

STEAM GAUGE OR CAB LAMPS

With Hood

Each

No. 160—11¼x6¼ in., 22 Gauge Brass, Polished; No. 1 Lard Oil Ratchet Burner, Burns Sperm or Signal Oil. Fount holds ¼ Pint and Burns 12 to 14 Hours with one Filling. $6 00

Open Stock; Weight 2 Lbs Each

STEAM GAUGE OR CAB LAMP GLOBES

Each

No. 160B—Extra Globes with Brass Rim on Top and Bottom. $3.70

Open Stock; Weight 1 Lb. Each

Each

No. 160P—Extra Globes, Plain. $0.50

Open Stock; Weight ⅝ Lb. Each

WATER GAUGE LAMPS

No. 170—9⅝x3¼ in., 22 Gauge Brass, Polished; No. 1 Lard Oil Ratchet Burner, Burns Sperm or Signal Oil, Fount Holds ¼ Pint and Burns 14 to 16 Hours with One Filling. $2.50

Open Stock; Weight ⅝ Lb. Each

LAMPS

BRACKET

For Side Wall or Stand

1½ Pint Glass Fount; French Bronzed, Swinging Iron Bracket; 8 in. Silvered Glass Reflector, No. 2 Sun Burner and Chimney, 1 in. Wick.

	Per Dozen
No. 1B—Plain Fount	$9.00
No. 2B—Handled Fount	9.60

Weight 46 Lbs. per Dozen

FOR SIDE WALL OR STAND

Per Dozen

No. 100—Radiant; Green Japanned Tin Bracket; 1 Pint Glass Fount; Burns 12 Hours; Fluted, Bright Tin Reflector; No. 2 Sun Burner and Chimney, 1 in. Wick; Height 13 in.; Weight 30 Lbs. Dozen..... $5.40

CLIMAX

For Side Wall or Stand

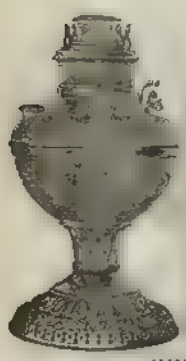
Per Dozen

No. 10C—1½ Pint, Blue Japanned Tin Fount; Burns 16 Hours; 8x8 in. Bright Tin Corrugated Reflector, No. 2 Sun Burner and Chimney, 1 in. Wick; Height 13 in.....$6.00

One Dozen in a Case

Weight 25 Lbs. per Dozen

LAMP FOUNTS; WITHOUT CHIMNEY



With 10 in. Tripod, No. 2 Round Lift Burner and Wick; Height 12 in., Diam. of Bowl 6 in.; holds 2¾ Pints; Burns 7 to 8 hours; Takes No. 2 Rochester Chimney 2⅝x10 in.

JUNO PARLOR

With Burner and Wick

	Per Dozen
No. 1J—Polished Brass	$27.00
No. 2J—Nickel Plated Brass	[illegible]

Weight 36 Lbs. per Dozen

Holds 1 Gallon, burns 12 hours. No. 3 Burner and Wick; Height 11 in., Diam. 8¾ in.; takes No. 3 Rochester Chimney 4x12 in.; can be used with Harps No. 3B and 3BC and as Bracket or Stand Lamp.

JUNO MAMMOTH STORE

With Burner and Wick

Per Dozen

No. 3J—Polished Brass, Embossed; 300 Candle Power $36.00

Weight 48 Lbs. per Dozen

With Pipe Thread Base to take ⅜ in Nipple if used as Wall Lamp

JUNO STORE

65 Candle Power, With Burner and Wick Holds 3 Pints, Burns 9 Hours; No. 2 Round Lift Burner and Wick; Height 8½ in., Diameter 6¼ in.; takes No. 2 Rochester Chimney, 2⅝x10 in.; can be used with Harp No. 2B, and as Bracket or Stand Lamp.

	Per Dozen
No. 30JB—Polished Brass	$21.00
No. 30JN—Nickel Plated Brass	24.00

Weight 24 Lbs. per Dozen

GLASS FOUNTS ONLY

Plain **Handled**

1½ Pint, for Size 2 Burner and 1 in. Wick; Height 3⅞ in.; Diameter 6 in.

No. 1P—Plain Fount, without Handle; Weight 105 Lbs. per Case.....$1.80

Five Dozen in a Case

No. 2H—Handled Filler Fount; Weight 80 Lbs. per Case..... 2.40

Three Dozen in a Case

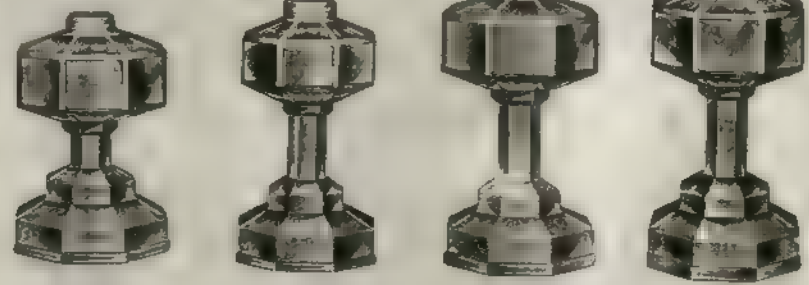
MASCOT FOUNTS

Per Dozen

No. 1M—One Pint, without Handle; for Radiant Wall Lamps.....$1.50

Five Dozen in a Case

GLASS LAMP ASSORTMENTS



Sewing 8¼ in. High Capacity 34 Oz.

Stand or Table 9 in. High Capacity 14 Oz.

Stand or Table 9¾ in. High Capacity 20 Oz.

Stand or Table 10 in. High Capacity 24 Oz.

Each Lamp is made in One Piece of heavy, clear, flint glass, with Brass clinch collar, broad, solid base

Per Assortment

No. 9937—Two Dozen Lamps, assorted One Quarter Dozen 8¼ in., One Dozen 9 in., One Half Dozen 9¾ in. and One Quarter Dozen 10 in., Capacities as noted under each Illustration .....

One Assortment in a Barrel; Weight 95 Lbs. per Assortment

HEDDON'S SPECIAL CASTING RODS

SPLIT BAMBOO

In Ordering Heddon Rods, Please Be Sure to State Length Desired

Finest Selection of Split Bamboo; Tip and Butt Seasoned for several years, before made up; Solid, Satin Cork Grip of Special Design; Extra Heavy German Silver Metal throughout, beautifully ornamented; Hood at rear, on Reel Seat and Locking Reel Band; All Guides and Tip Tops Agate; Closely wrapped with a beautiful Design of Silk Windings in Four Colors.

Each

No. H15—Two Joints and Extra Tip; Length 4½ and 5 Ft..$15.00

One in a Velvet Bag and Waterproof Leatherette Case

Finest Selection of Split Bamboo; Solid, Satin Cork Grip of Special Design and Forward Grip; Extra Heavy German Silver Metal throughout, beautifully ornamented; Hood at rear on Reel Seat and Locking Reel Band; All Guides and Tip Tops Agate; Middle Guides File Proof Metal; Wound at close intervals with Silk Windings in a beautiful Design of Three Colors.

Each

No. H10—Two Joints and Extra Tip; Length 4½ and 6 Ft..$12.00

One in Partitioned Canvas Bag and Waterproof Leatherette Case

Selected Split Bamboo; Solid Satin Cork Grip of Special Design; Extra Heavy Nickeled Reel Seat with Hood at Rear and Locking Reel Band; Both Tips have Agate First Guide and Agate Top; The other Tip has Agate Top and File Proof Metal Guides; Improved Welted Ferrule; Closely Wrapped with Silk Windings in Three Colors.

Each

No. H65—Two Joints and Extra Tip; Length 4½ and 5 Ft....$8.00

One in a Partitioned Canvas Bag

Good Quality Split Bamboo; Solid Cork Grip; Crystal Agate Tops and First Guides, other Guides File Proof Metal; Extra Heavy Nickeled Reel Seat with Hood and Trigger at rear and Locking Reel Band; Improved Welted Ferrule; Improved Winding Design, with Silk Windings in Three Colors.

Each

No. H4—Two Joints and Extra Tip; Length 4½ and 5 Ft....$6.00

One in a Partitioned Canvass Bag

Good Quality Split Bamboo; Solid Cork Grip; Nickeled Reel Seat with Hood at Rear and Trigger on Band; All Guides File Proof Metal and Tip Top Crystal Agate; Improved Welted Ferrules; Improved Winding Design, with Silk Windings in Two Colors

Each

No. H2½—Two Joints and Extra Tip; Length 4½ and 5 Ft..$4.00

One in a Partitioned Cloth Bag

Good Quality Split Bamboo Butt and Tip; Tip Top Crystal Agate; Polished Maple Handle of Special Design; Nickeled Reel Seat with Hood at Rear and Trigger on Band; All Guides File Proof Metal; Improved Welted, German Silver Ferrule; Well Wrapped with Silk Windings in Two Colors.

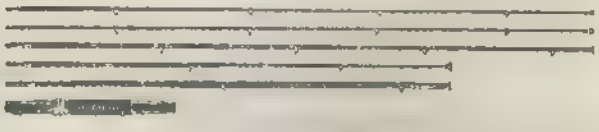
Each

No. H1½—Two Joints; Length 4½ and 5 Ft $2.50

One in a Partitioned Cloth Bag

COMBINATION RODS

Comprising Four Distinct Rods in One, this feature will be readily appreciated by the Fisherman who understands that all styles of Fishing cannot, successfully, be performed with the one Rod. These, however, in some of their combinations, will furnish a Rod for nearly every occasion and only necessitates the buying and carrying of one. Each made of Six Strips of Selected, Split Bamboo, carefully and firmly Cemented and Wound with Green Silk, then coated with Spar Varnish, making it strictly Waterproof; All Mountings are Nickel Plated, and all Ferrules Improved, Welted.

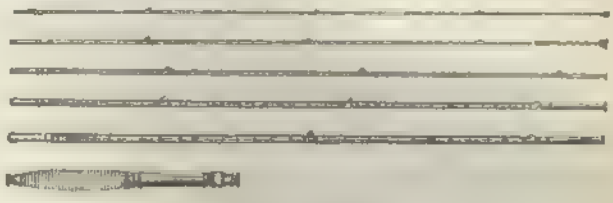


FLY OR TROUT

Each

No. FC90—Three Joints, Handle with Two Tips, also Heavy Tip which fits into Handle and makes a 3¼ Ft. Casting Rod; The other Joints can be arranged to make a Two Joint 6 Ft. Casting Rod and a Two Joint 7 Ft. Fly Rod, also a Three Joint 9½ Ft. Fly Rod; Has German Silver Snake Guides and Ring Tops, Cork Grip, Detachable Reversible Handle, which allows the Solid Metal Reel Seat to be used either above or below hand; Weight 8 Oz. Each.....$9.50

One on a Flannel Covered Form, in Canvas Bag



TROUT OR BASS

Six different lengths can be made with this Rod; The Reel Seat can be placed above or below the handle

Each

No. BC911—Four Joints, with Extra Strong Tip; Detachable, Reversible Cork Grip, with an inserted Shortener; Fine Selected Cane; Full Nickel Plated Mountings; Solid Metal Reel Plate; Improved, Welted Ferrules; Silk Wound, German Silver Snake Guides; Closely Wrapped with Scarlet and Yellow Silk; Weight 8 Oz. Each.....$9.00

Note—The Weights given are for Rods only and do not include the Form and Bag, which weigh about 12 Oz. additional

MARSWELLS STEEL FISH RODS

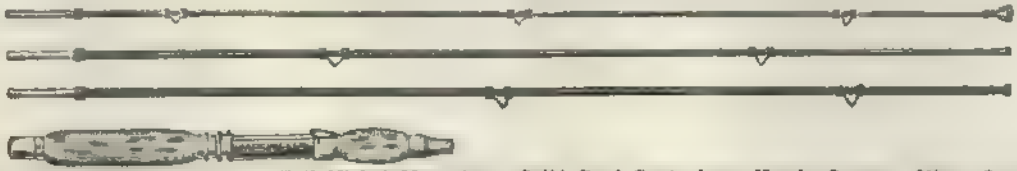
These Rods approach as nearly an Ideal Standard as Mechanical Skill and Practical Knowledge of the Angler's needs can produce. The greatest care is exercised in the selection of material and in the workmanship. They are made from the best Imported Steel. Not only is the Steel made from our own special analysis, but every piece of the different gauged material is analyzed to be sure that every Rod will be uniform. During process of manufacture each Rod is subjected to the closest scrutiny, and each part is put ot all manner of tests, and when finished, subjected to test 50% greater than other so-called high grade Rods. They are enameled in a color that will not reflect light, which is a recognized advantage. All parts are interchangeable. All Rods guaranteed against imperfection in material or workmanship.

FLY OR TROUT RODS

Genuine Cork Grip, Full Nickel Mountings, Solid Reel Seat below Hand; German Silver Snake Guides; Locking Reel Band

	Each
No. A86—Length 8½ Ft., Joints 33 in.; Weight 8½ Oz.	$3.50
No. A9 —Length 9 Ft., Joints 35 in.; Weight 9 Oz.	3.50
No. A96—Length 9½ Ft., Joints 37 in.; Weight 9¼ Oz.	$3 50
No. A10—Length 10 Ft., Joints 38 in.; Weight 9½ Oz.	3.50

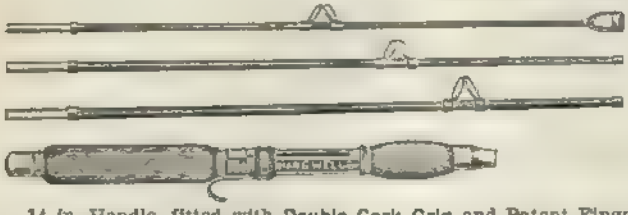
BAIT OR BASS RODS



14 in Handle, fitted with Double Cork Grip, Full Nickel Mountings, Solid Reel Seat above Hand, German Silver Snake Guides; Three Ring Top, Locking Reel Band

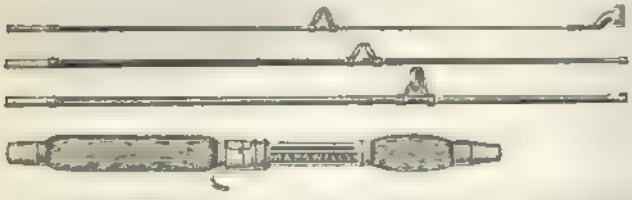
	Each
No. C5—Length 5 Ft., Joints 19 in.; Weight 7 Oz.	$4.00
No. C6—Length 6 Ft., Joints 23 in.; Weight 8 Oz.	4.00
No. C7—Length 7 Ft., Joints 28 in.; Weight 8¼ Oz.	4.00
No. C8 —Length 8 Ft., Joints 32 in., Weight 8½ Oz.	$4 00
No. C9 —Length 9 Ft., Joints 36 in.; Weight 9 Oz.	4 00
No. C10—Length 10 Ft., Joints 38 in., Weight 9½ Oz.	4.00

SPECIAL BAIT CASTING RODS



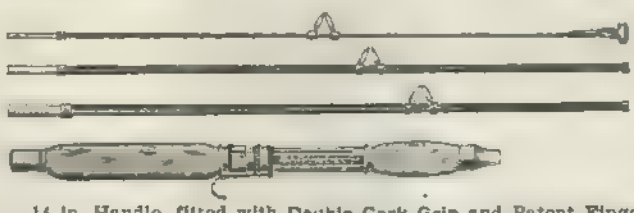
14 in. Handle, fitted with Double Cork Grip and Patent Finger Hook; Full Nickel Mountings, Solid Reel Seat above Hand; Large Two Ring German Silver Casting Guides and German Silver Double Hole Top.

	Each
No. E5 —Length 5 Ft., Joints 19 in.; Weight 7½ Oz.	$4.50
No. E56—Length 5½ Ft., Joints 21 in.; Weight 8 Oz.	4.50



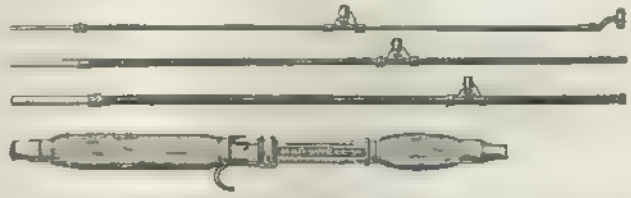
14 in. Handle, fitted with Double Cork Grip and Patent Finger Hook; Full Nickel Trimmings; Solid Reel Seat above Hand; Large Agate First Guide and Special Agate Offset Casting Top; Other Guides German Silver.

	Each
No. H46—Length 4½ Ft., Joints 17 in.; Weight 7 Oz.	$6.00
No. H5 —Length 5 Ft., Joints 19 in.; Weight 7¼ Oz.	6.00
No. H56—Length 5½ Ft., Joints 21 in.; Weight 8 Oz.	6.00
No. H6 —Length 6 Ft., Joints 23 in.; Weight 8½ Oz.	6.00



14 in. Handle, fitted with Double Cork Grip and Patent Finger Hook; Full Nickel Mountings; Solid Reel Seat above Hand; Large Two Ring German Silver Casting Guides and Special Agate Casting Top.

	Each
No. G5 —Length 5 Ft., Joints 19 in.; Weight 7½ Oz.	$5 00
No. G56—Length 5½ Ft., Joints 21 in.; Weight 8 Oz.	5 00



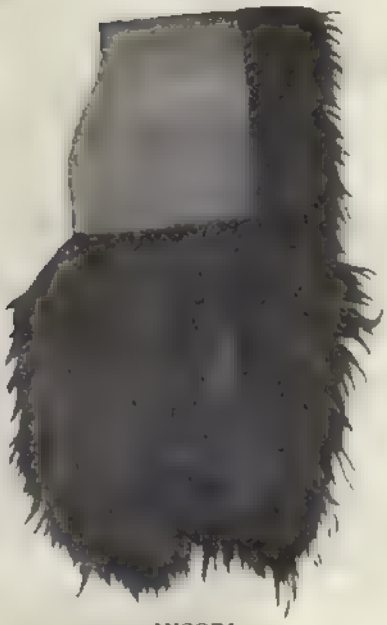
14 in. Handle, fitted with Double Cork Grip and Patent Finger Hook; Full Nickel Trimmings; Solid Reel Seat above Hand; Large Full Agate Casting Guides and Special Agate Offset Casting Top; German Silver Mountings

	Each
No. M46—Length 4½ Ft., Joints 17 in.; Weight 7 Oz.	$8.00
No. M5 —Length 5 Ft., Joints 19 in.; Weight 7½ Oz.	8.00
No. M56—Length 5½ Ft., Joints 21 in.; Weight 8½ Oz.	8.00

All Above, One in a Partitioned Cloth Bag

For Extra Joints and Tips for Above Rods, See Page 3185

SADDLE BAGS



ANGORA

Size 9½x18 in.; Size of Pockets 8x8½ in.; Plain Russet Leather; Genuine Angora Hair Covered.

	Per Pair
No. 40—White	$19 00
No. 42—Black	19 00

Weight 4½ Lbs. per Pair

RUSSET LEATHER

	Per Pair
No. 44—Basket Stamped Border, Size 9½x18 in., Pockets 8x8½ in	$12.30

Weight 3½ Lbs. per Pair

RUSSET LEATHER

	Per Pair
No. 46—Narrow Edge Stamped, Size 8x18 in., Pockets 6½x8 in	$11.80

Weight 3¼ Lbs. per Pair

LEATHER CUFFS

	Per Doz. Pairs
No. 10—7 in. Flower Stamped; Snap Glove Fastener, Riveted at Top	$24 00

Wt. 7 Lbs. per Doz. Prs.

	Per Doz. Pairs
No. 12—7 in. Fancy Stamped, 2 Rows Nickel Spots, Glove Fastener Roll Buckle at Wrist, Laced Top	$47 70

Wt. 8 Lbs. per Doz. Prs.

	Per Doz. Pairs
No. 14—7 in. Horse Shoe Design, Nickel Spotted Buckle at Wrist, Riveted at Top	$36 00

Wt. 7 Lbs. per Doz. Prs.

No. 16 Without Spots. Otherwise same as No. 14 30 00

Wt. 6 Lbs. per Doz. Prs.

	Per Doz. Pairs
No. 18—7 in. Clover Leaf Design, Nickel Spotted Snap Glove Fasteners Riveted at Top	$38 00

Wt. 7 Lbs. per Doz. Prs.

No. 20—Without Spots, Otherwise same as No. 18 30 00

Wt. 6 Lbs. per Doz. Prs.

	Per Doz. Pairs
No. 22—6½ in. Basket Stamped, Buckle at Wrist Laced Top	$25.20

Wt. 6 Lbs. per Doz. Prs.

	Per Doz. Pairs
No. 24—6½ in. Plain Glove Leather Roll Buckle at Wrist, Laced Top	$28.00

Wt. 7 Lbs. per Doz. Prs.

No. 26—Without Roll and Riveted at Top, Otherwise same as No. 24 24 00

Wt. 6 Lbs. per Doz. Prs.

	Per Doz. Pairs
No. 28—6½ in. Plain, Snap Glove Fastener at Wrist Riveted Top	$24 00

Weight 5 Lbs. per Dozen Pairs

BOYS'

	Per Dozen Pairs
No. 30—5 in. Bead and Vine Edge, Snap and Glove Fastener at Wrist, Riveted at Top	$12 00

Weight 4 Lbs. per Dozen Pairs

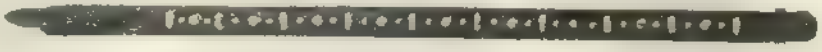
LEATHER HAT BANDS

No. 0—1⅛ in. Wide, Hand Flower Stamped, Cinch Fastener..... Per Dozen $13.00
Weight 2 Lbs. per Dozen

No. 1—1¼ in Wide, Nickel Peanut Spots, Snap Glove Fastener..... Per Dozen $13 50
Weight 2 Lbs. per Dozen

No. 2—1 in. Wide, Nickel Spots, Buckle Fastener..... Per Dozen $10 00
Weight 1⅝ Lbs. per Dozen

No. 3—1 in. Wide, Nickel Express Spots, Cinch Fastener..... Per Dozen $10 00
Weight 2¼ Lbs. per Dozen



No. 4—⅞ in. Wide, Nickel Round and Peanut Spots, Leather Fastener..... Per Dozen $10 00
Weight 1½ Lbs. per Dozen

No. 5—1 in. Wide, Russet Leather; Embossed, Three Glove Fasteners with Slide Loop..... Per Dozen $5 00
Weight 1 Lb. per Dozen

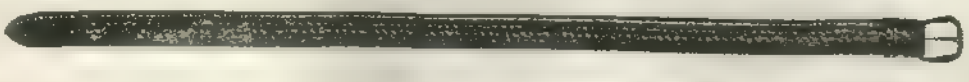
No. 6—⅝ in. Wide, Russet Leather; Wheeled Border, Nickel Buckle..... Per Dozen $2 50
Weight ¾ Lb. per Dozen

No. 7—¼ in. Wide, Russet Leather; Plain, Nickel Bar Buckle..... Per Dozen $2 00
No. 8—⅜ in. Wide, Russet Leather; Plain, Nickel Bar Buckle..... 2 00
Weight ⅝ Lb. per Dozen

MEN'S BELTS

Lengths 32 to 42 Inches

No. 9—1 in. Assorted, Fancy Stamping and Buckles..... Per Dozen $7 20
Weight 3 Lbs. per Dozen



No. 10—1¼ in. Assorted, Fancy Stamping and Buckles. Weight 4½ Lbs. per Dozen..... Per Dozen $9 00
No. 11—1¾ in. Assorted, Fancy Stamping and Buckles. Weight 5¾ Lbs. per Dozen..... 10 80

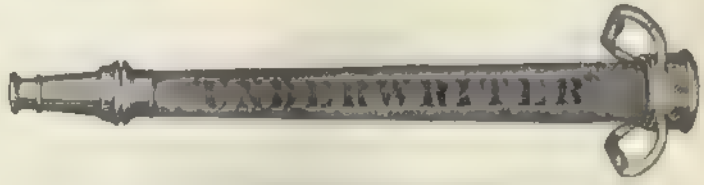
All Above, Open Stock

HOSE PIPES

SWIVEL HANDLE PLAY PIPES

Size Hose, In.	2	2½	2½	2½
Length, In	20	24	30	36
Weight Each, Lbs.	5	6	8½	9
No. 15—Wound and Painted, Each	$9 00	11 00	*	15 00
No. 16—Plain Brass, Each	7 50	9 50	11.00	13 50

*See No. 20—Underwriters' Pipes



UNDERWRITERS' PIPES

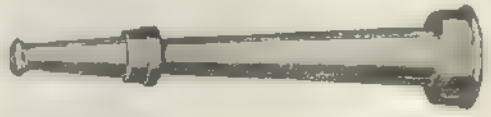
Made in strict accordance with the latest specifications of the Associated Factory Mutual Fire Insurance Companies

Each

No. 20—For 2½ in Hose, Length 30 in; Screw Nozzle, Swivel Handle Marlin Wound and Painted Red $10.00

Weight 10 Lbs. Each

Directions for Ordering: Send Sample of Hose Coupling if Thread is not Standard Iron Pipe Thread

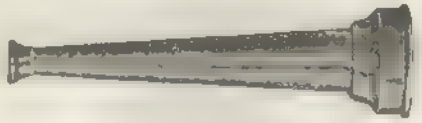


PLAIN BRASS, SCREW TIP, NO HANDLE

No. 601—With Cock, Iron Pipe Threads
No. 602—With Cock, Hose Pipe Threads
No. 611—Without Cock, Iron Pipe Threads
No. 612—Without Cock, Hose Pipe Threads

Size Hose, In.	¾	1	1¼	1½	2	2½
Length, In.	8	8	12	12	20	20
Size Tip, In.	½	½	½	½	⅝	⅞
Weight Doz., Lbs.	10	15	30	30	51	141
Iron Pipe, per Doz	$14 00	18 00	43 00	60 00	113 00	170 00
Hose Pipe, per Doz	13 00	15.00	40 00	55 00	110 00	160 00

Size Hose, In.	¾	1	1¼	1½	2	2½
Length, In.	7½	8½	12	13	15	20
Size Tip, In.	½	½	½	½	⅝	⅞
Weight Doz., Lbs.	4½	9	18	26	36	69
Iron Pipe, per Doz	$9 20	11 20	21 20	27.50	48 00	99 50
Hose Pipe, per Doz	8 00	10 00	20 00	25.00	45 00	96 00



PLAIN BRASS

No. 621—Iron Pipe Threads, to Screw
No. 622—Hose Pipe Threads, to Screw

Size Hose, In.	¾	1	1	1¼	1¼	1½	1½	2	2	2½	2½
Length, In.	6	4	8	4⅜	12	5¾	12	6¾	12	7½	12
Weight Doz., Lbs.	4	5¾	8	6	10½	6¾	12	15	20	21	28
Iron Pipe, per Doz	$5 00	6.25	10.00	13.75	19.75	19.75	24.00	29.00	39.00	39.50	60.00
Hose Pipe, per Doz.	4.00	5.00	9.00	12 00	18 00	18 00	22.00	26 00	34 00	37 00	55 00

PLAIN BRASS

No. 633—To Wind

Size Hose, In.	¾	1
Length, In.	5½	6
Weight Dozen, Lbs.	3	6
Per Dozen	$4 00	5 00

FIRE DEPARTMENT HOSE PIPES

With No. 25 Shut-off Nozzles Attached

Wound and Painted, with Two Leather Handles with Swivel Base and Top. Made from Cast Brass Machined Inside and Outside, with Walls so Thick that it is impossible to Dent or Injure them.

Each

No. 30—Size 2½x14½ in. Over-all $25 00

Weight 8½ Lbs. Each

SHUT-OFF NOZZLES

For Use with Fire Department or Other Pipes. In combination with the Hose Pipe it is the best fire fighter known. Highly Finished.

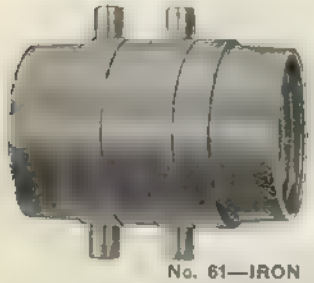
Nozzle is open when the Handle lies back against the Base. Can be used to break through a window without shutting it off. When shut off, Nozzle can be dragged over the ground without danger of turning it on.

Each

No. 25—Length 7 in. $15.00

Weight 4 Lbs. Each

HOSE FITTINGS



AUTOMATIC COUPLINGS

In ordering, give exact Outside Diam. of Hose and also the kind of Hose; send Sample if possible. **We must have a Sample Coupling unless it is Iron Pipe Thread.**

No. 61—IRON PIPE THREADS
No. 62—HOSE PIPE THREADS

For Unlined Linen Fire Hose
For Cotton Jacket Rubber Lined Mill Hose
For Heavy Single Jacket Rubber Lined Fire Hose
For Double Jacket Rubber Lined Fire Hose

Size Hose, In.	1¼	1½	2	2½
Wt. Each, Lbs.	1¼	2	3¼	4¼
Each	$4 00	4 00	5 00	6 00
INSIDE DIAM. OF TAIL-PIECE IN				
Unlined Linen	1 15/32	1¾	2 7/32	2¾
Cotton, Rubber Lined Mill	1 19/32	1¾	2¾	2 11/16
Heavy Single Jacket, Fire	1 19/32	1 7/8	2¾	2 11/16
Double Jacket, Fire	...	...	...	3⅛

Two Expansion Rings and Rubber Washer included with each Coupling

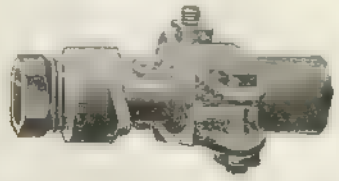
WATER HOSE COUPLINGS, Cast Brass

No. 71—IRON PIPE THREADS

No. 72—HOSE PIPE THREADS

Size Hose, In.	1	1¼	1½	2	2½
Weight per Doz., Lbs.	6	10	12	22	32
Iron Pipe Thread, per Doz.	$4 65	10 50	15 00	26 00	50 00
Hose Pipe Thread, per Doz.	4 40	10 00	14 00	24 00	48.00

Open Stock



No. 95—ROCK DRILL COUPLINGS

Made of Malleable Iron and Composition Gun Metal. These Couplings are intended for Rough Work and are made especially heavy to withstand knocking about and hardest use.

Size Hose, In.	¾	1	1¼
Wt. Each, Lbs.	1¾	3	4
Each	$4 00	5 00	6.50

No. 1—AUTOMATIC COUPLING EXPANDERS

Is held in an ordinary bench vise or Bolted to the Bench

Size, In.	1¼	1½	2	2½
Weight Each, Lbs.	9	12	16	23
Each	$15 00	15 00	15.00	15 00

Open Stock

SHERMAN HOSE CLAMPS

In Ordering Clamps state Size and Ply of Hose and give our Number.

Made of Steel, Brass, and Iron Rust on the hose. Lighter, Stronger and more reliable than Cast Brass. The Tongue of the Clamp prevents the Hose from bulging and bunching at this point

No. 34—For 3 and 4 Ply Water Hose

Size Hose, In.	¾	1	1	1¼	1¼	1½	1½	2	2½	2½
Ply, Hose	4	3	4	3	4	3	4	4	4	4
Diam. Open, In.	1¼	1 3/16	1 11/32	1 21/32	1 11/16	1 11/16	2 1/16	2 5/16	2½	3 1/16
Wt. Doz., Lbs.	¾	1 1/8	1½	1¾	2	2¼	2½	3 1/8	4	4¼
Gross in Pkg.	1	½	½	½	½	¼	¼	⅛	1/19	1/19
Per Dozen	$2 00	2 00	2 00	2.50	2 50	3.00	3 00	4 00	6.50	7 00

No. 35—For 3, 4 and 5 Ply Steam Hose

1	1¼	1½	1½	2
3	4	4	5	4
1 5/16	1 21/32	2 3/32	2 13/32	2 11/16
1¾	2¼	2 5/8	3	3 7/8
½	¼	¾	⅝	⅛
2 50	3 00	3 50	4.00	5.50

The above assortment of Clamps will fit all sizes and plies of Steam and Water Hose from ¾ to 2½ inches; also Cotton Rubber Lined Mill Hose.

GALVANIZED HOSE CLAMPS

In ordering Clamps state Size and Ply of Hose, and give our Number.

Made of Galvanized Steel, demonstrated to be especially well fitted for a Strong, Light and Phable Hose Clamp. The construction offers a true inner circle both before and after tightening. It will not leak.

No. 134—For 3 and 4 Ply Hydrant Hose

Size Hose, In.	1	1	1¼	1¼	1½	1½	2	2½	2½	3
Ply Hose.	3	4	3	4	3	4	4	4	4	4
Diam. Open, In.	1 3/8	1 7/8	1 11/16	1 11/16	2	2 1/16	2 5/16	2 11/16	3	3 1/16
Wt. Doz., Lbs.	1	1	1½	1½	1¾	1¾	3 3/8	4	4	5
Dozen in Box	3	3	3	3	3	3	2	2	2	1
Per Dozen	$1.50	1 50	2 50	2.50	3.00	3.00	4 00	5.50	7 00	10.00

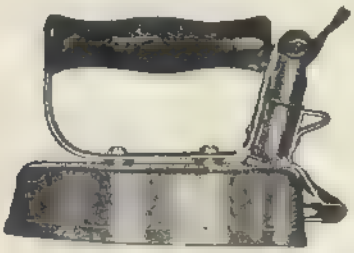
No. 135—For 3 4 and 5 Ply Steam Hose

1	1¼	1½	1½	2
3	4	4	5	4
1 5/16	1 11/16	2 1/16	2 5/16	2 5/8
1½	1¾	2 5/8	2¾	3¾
3	3	3	3	2
2.50	3 00	3 00	3 50	5 50

HOT POINT ELECTRICALLY HEATED APPLIANCES

Will Operate on Direct or Alternating Current

110 Volts Carried in Stock, Other Voltages on Special Order, excepting 220 Volt 5 and 6 Lb. Domestic Irons, which are Carried in Stock. Every Hotpoint Iron is so designed that a greater amount of heat is delivered to the point than to the balance of the sole-plate



This is very important, for the point of the Iron is constantly pushed forward into the damp goods, and thus more heat is extracted from it

The Heating Element is in two sections, arranged V-shape on the sole-plate, with the apex of the V at the point of the Iron, where most heat is applied.

The Flat Heating Element, clamped between a heavy pressure plate and the sole-plate, is right in the center of the mass of Iron to be heated, and a thick asbestos plate in the cover prevents radiation upward

Hence a cool handle (no pad ever needed) and such high efficiency that one can Iron with the switch plug out a large part of the time.

HOTPOINT DOMESTIC IRONS

In addition to the features mentioned above, the Domestic Irons have an Attached Stand, upon which the Iron is quickly and easily placed by simply tipping it up on end, without lifting.

The 5 and 6 Lb. Sizes are for the regular family ironing, for which the heavier one is usually preferred, but women who are not strong, or those who do only a part of the ironing, often prefer the 5 Lb Size.

Polished Nickel Finish; Furnished with Cord, Attachment Plug and Switch Plug; Heating Element guaranteed for 1 year.

Weight, Lbs.	5	6	8
Sole Plate, In.	2¾x5⅝	3⅛x6¼	4x8⅝
Watts	330	500	575
Each	$4 00	5 00	5 00

BOUDOIR SETS

110 Volts; a Handy and Compact Set, put up in a Neat and Attractive Felt Bag; Can be carried anywhere and will prove a great convenience to any lady, either at home or while traveling or at the hotel

	Per Set
Boudoir Set—Consists of a 3 Lb Hot Point Iron, Size 5⅛x3¼ In., with Inverting Stand, Curling Tongs and Attachment for Heating Curling Tongs, Cord and Plug and Switch Plug	$5.00

One Set in a Felt Box; Weight 4 Lbs. per Set

HOTPOINT LAUNDRY IRONS

Polished Nickel Finish; Furnished with Cord, Switch Plug, Suspension Spring and Two-Dec.. Stand; Require Special Wiring; the Heating Element is guaranteed for 1 year.

Weight, Lbs.	7½	8½	10	12	15
Sole Plate, In.	4⅛x7	4½x7	4⅝x7¼	4¾x7⅝	5¼x7¾
Watts,	700	750	800	850	900
Each	$6 50	6.50	7.50	12.50	14.00

HOTPOINT TAILORS' IRONS; THREE HEAT

The Most Practical Iron for the Modern Tailor

Furnished with Cord, Switch Plug, Suspension Spring and Two-Deck Stand; Require Special Wiring; Heating Element guaranteed for 1 year.

Weight, Lbs.	15	20	25
Sole Plate, In.	3x10¼	3¼x10⅛	4x12
Watts	850-425-212	900-450-225	1000-500-250
Each	$16 00	17.00	20.50

Can also be Furnished in Single Heat Style at a reduction in list of $2 00

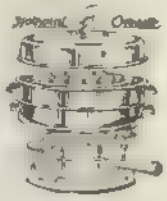
THREE HEAT RADIANT GRILL

An improved type of Grill, similar to Single Heat, No. 20102 Grill, but including an Extra Dish, and Three Heat Control, which will allow great economy of operation, for instance, food brought to a boil on High can easily be kept boiling on Medium or Low

Each

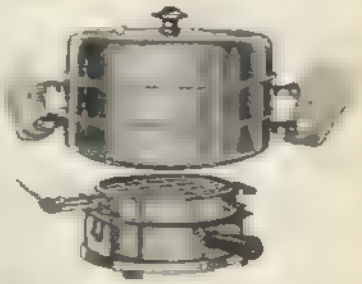
No. 20103—Three Heat Grill, with Two Dishes, Broiling Grid and Cover that can be used as a Hot Cake Griddle $6 50

One in Box, Complete; Weight 4 Lbs. Each



Ovenette

Single Heat Radiant Grill



Potatoes Au Gratin About 50 Minutes

HOT POINT OVENETTE AND SINGLE HEAT RADIANT GRILL

These two appliances make an excellent combination; Will bake pie, biscuit, cake, apples, potatoes, etc., and roast meats and game of all kinds with current from an ordinary lamp socket.

Each

No. 40701—Ovenette; Composed of Bottom Pan, Extension Ring Cover and Baffle Plate; 11 in. in Diameter, 6 in. High, without Ring; Height of Ring 1½ in.; Height from Baffle Plate to Top, without Ring, 3¾ in.; Diameter of Baffle Plate 9 in.; Polished Nickel Inside and Outside $3.50

Weight 3⅛ Lbs. Each

No. 20102—Single Heat Radiant Grill Consists of Coil Stove, under Dish, with Removable Broiling Grid, Reflector, Cord with Attachment Plug and Interchangeable Switch Plug, Made of Pressed Steel, Nickel Plated Diameter of Top 7¼ in., Height 4⅛ in., Diameter of Base 9 in. Under Dish Diameter Inside 7⅜ in., Depth 1⅝ in.; Capacity 2¼ Pints when full. Element guaranteed for 1 year; 600 Watts $6.00

Extra Shallow Dish 50

Weight 3⅝ Lbs. Each

All Above, One in a Box

HOT POINT ELECTRICALLY HEATED APPLIANCES

Will Operate on Direct or Alternating Current

110 VOLT CARRIED IN STOCK; OTHER VOLTAGES ON SPECIALORDER

EL PERCO COFFEE MACHINES

Coffee is drawn from a Faucet instead of Spout as in the No. 800; Made of Copper, Polished Nickel Finish; Furnished with Cord, Attachment Plug and Switch Plug, Heating Element guaranteed for 1 year.

	Each
No. 1000—9 Cup, 450 Watts	$12 00

Weight 2½ Lbs. Each

EL PERCO COFFEE POTS

The Most Efficient Electric Percolator

Made of Copper, Polished Nickel Finish; Furnished with Cord, Attachment Plug and Switch Plug; Heating Element guaranteed for 1 year.

	Each
No. 20636—6 Cup, 400 Watts	$9 00

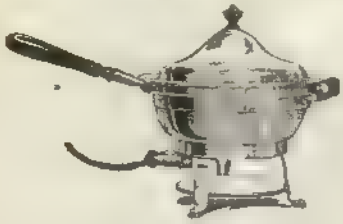
Weight 3 Lbs. Each

ALUMINUM EL PERCO PERCOLATORS

Seamless Aluminum, Highly Polished, No Valves or Moving Parts; Easily Cleaned Ebonite Handle; Glass Top; Heating Element guaranteed for 1 year.

	Each
No. 500—6 Cups, 400 Watts	$7 00

Weight 2 Lbs Each



No. 4—EL CHAFO

This Chafing Dish has no Heating Element; It is intended for use on the 6-inch El Stovo, listed on page 366½, and on which it is shown in above illustration

It has the advantage of being removable from the stove, leaving that free for other uses

	Each
No. 4—Chafing Dish, without Stove; Made of Copper, 9½ in. Diameter; Polished Nickel Finish Outside, Block-Tin Coated Inside; Ebonite Handles; Furnished with Cord	$5 00

Weight 2½ Lbs. Each

No. 5—EL CHAFO

Wattage 225-450

This Chafing Dish is Complete with Heating Element, located in the center of the Water Pan; It has high and low heat, obtained by inserting the Switch Plug in either of two receptacles at the base

	Each
No. 5—Made of Copper, 9½ in. Diameter, 7¼ in. High; Polished Nickel Finish Outside; Block-Tin Coated Inside; Ebonite Handle, Furnished with Cord, Attachment Plug, Switch Plug; Heating Element guaranteed for 1 year	$12.00

Weight 3 Lbs. Each

No. 6—MISSION EL CHAFO

Wattage 225-450

The same in construction, finish, equipment, and guarantee as No. 5, but of heavier Copper, and in handsome Mission Design

	Each
No. 6—Made of Copper, 9½ in. Diameter, 7¼ in. High; Polished Nickel Finish Outside; Block-Tin Coated Inside; Ebonite Handle; Furnished with Cord, Attachment Plug and Switch Plug; Heating Element guaranteed for 1 year	$15.00

Weight 5 Lbs. Each

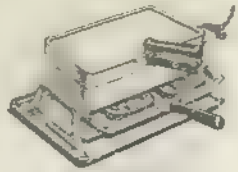
EL TOSTOVO

Combination Toaster and Stove; Will Boil and Fry, with small Aluminum or Tin Dishes; also used for Popping Corn.

Made of Pressed Steel; Top and Base come apart, for Cleaning, etc.; Polished Nickel Finish

Furnished with Cord, Attachment Plug and Switch-Plug; Heating Element guaranteed for 1 year.

Size	Area	Heating Watts	Weight	Each
5½x9½ in.	32 sq. in.	500	1¾ Lbs.	$4.00



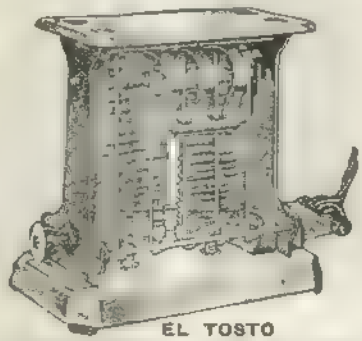
EL GRILLO

Boils, Broils, Fries and Toasts, both above and below the glowing coils; also Pops Corn.

Three Dishes, 4½x8½ in., and 1⅛, ⅝ and ¼ in. Deep; the Shallow Dish being also used as a cover for the others; Each Dish fits either above or below the Coils.

Pressed Steel, Polished Nickel Finish Furnished with Cord, Attachment Plug and Switch-Plug. Heating Element guaranteed for 1 year.

Size	Watts	Weight	Each
8x10½ in.	600	3½ Lbs.	$5.50



EL TOSTO

Vertical Toaster. Toasts two slices at a time, one on each side; Top may be used to keep Toast, Coffee or Tea Pot, etc., warm.

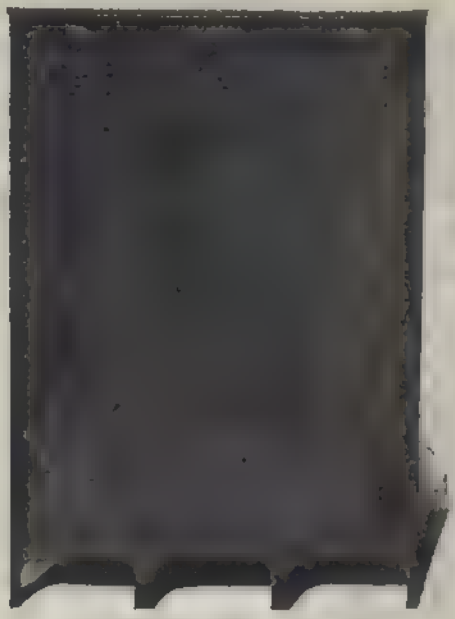
Made of Pressed Steel, Polished Nickel Finish.

Furnished with Cord, Attachment Plug and Switch-Plug. Heating Element guaranteed for 1 year.

Size	Watts	Weight	Each
7x7x6 in.	600	3 Lbs	$4 50

"H. & H." STEEL LOCKERS

These Steel Lockers are perfect in Mechanical Construction, Finish, Assembled Alignment and Durability; Their use reduces fire risk and they are absolutely sanitary; There is no place for Vermin; They provide a maximum hanging room in a minimum space and cost nothing for up-keep



Type BC, Single Tier
Showing Battery of Three Panel Doors

SLOPING TOPS

	Per Locker
Single Tier	$0.75
Double Tier	.45

Standard Finishes are Black, Olive Green, Dark Gray or Maroon; Special Finishes, prices on application only.

In ordering, specify arrangement (Single or Double Tier, also length of sections); Specify Size and Finish; Specify Type of Door and numbering arrangement desired; Specify Locking Device desired

Type AC, Double Tier
Showing Battery of Three Perforated Doors

Lockers are shipped Knocked-Down to secure lowest freight rates

SINGLE TIER, with Padlock Attachment, but without Locks

Size, In.	Length of Section: 3 Long or More Each	2 Long Each	Singly Each	Shipping Weights, Lbs.
12x12x60	$5 80	$6 40	$7 25	65
12x15x60	6.20	6 80	7.75	70
12x15x72	6.90	7.80	8.60	80
15x15x72	8.00	8.80	10.00	90
15x18x72	8.40	9.25	10.50	95
18x18x72	9.30	10 25	12.60	100

DOUBLE TIER, with Padlock Attachment, but without Locks

Size, In.	Length of Section: 3 Long or More Each	2 Long Each	Singly Each	Shipping Weights, Lbs.
12x12x36	$3 90	$4 30	$4 85	35
12x15x36	4.10	4.50	5.10	40
12x12x42	4.30	4.75	5.35	40
12x15x42	4.50	4.95	5.60	45

Above Lockers can be Shipped Promptly, Carried regularly in Stock by Factory, Other Sizes, Prices and Delivery on Application

Extras at Following List Prices, Subject to Change Without Notice

Locks All "H & H Steel Lockers may be equipped with one of the Types of Locks shown; They are the best of their kind, Select Type desired when ordering

	Each
Flat Key Lock, Master Keyed	$1.10
Miller or Eagle Time Combination	1.50
Miller Keyless Combination	1.10
Paracentric Key Lock	$3 00
Padlock	1 10

Padlock Attachment (without Padlock) no charge, if specified with order

Flat Key Lock, Master Keyed

is furnished with six Brass Tumblers and with Brass Springs; It admits of 5000 changes; Two Nickel Plated Flat Keys are furnished and all Locks are numbered and Keys registered; This is the Lock used unless otherwise specified.

"H. & H." Padlocking Device

Where a Padlocking Device is desired and is so specified when order is placed, the doors of our Lockers are fitted as shown in the Illustration.

Keyless Combination Lock

is operated by click; It has a Japanned Steel Case, Steel Bolt with ½ in. Throw and a Brass Knob, Finished in Natural Color

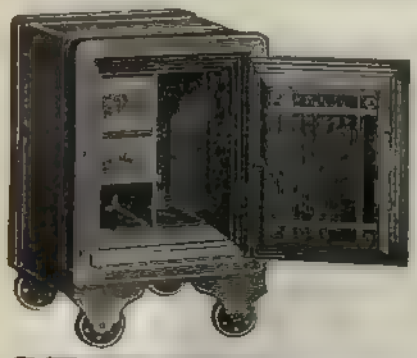
Time Combination Lock

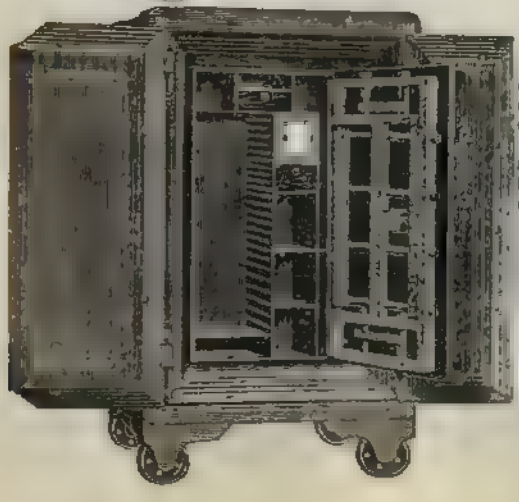
is operated by either touch or sight; It has a Nickel Plated Dial with Black Letters, and Nickel Plated Knob; Changes of Combination are made from the back.

FIRE-PROOF SAFES

Entire Page, F. O. B. Cincinnati, Ohio

When adjusting a loss, the insurance companies ask for the account books, insurance policies and last inventory. These records would be secure from all danger, in one of these safes. It would pay if you had nothing to put in but the day's sales and the insurance policy. Same construction as Safes on opposite page, but having Cash Box or Sub-treasury, instead of Burglar Proof Chest.





Outer and inner boxes are of wrought steel; the outside is one continuous wrought steel plate, bent to form top, sides and bottom; attached to heavy angle frames, making all corners round and a perfectly smooth surface, no panels.

The space between boxes is filled with concrete cement, in semi-liquid state; it permeates every crevice, then hardens into one solid mass.

There is no corrosion or dampness, but when heated by fire, the concrete generates a vapor, filling every pore and forming a cool, moist wall around the contents.

Doors are stepped and flanged, secured by front and back bolts; non-pickable combination lock, with T handle on bolt work of outside door (key-lock if preferred); cylinder key lock on inside doors.

Finished in black with handsome decorations; customer's name lettered on case, free of charge.

SINGLE OUTSIDE DOOR, with Cash Box

Nos.	Each	Weight Lbs.	Outside Measure, In. High	Wide	Deep	Inside Measure, In. High	Wide	Deep	Drawers	Pigeon Holes	Book Spaces
344A	$40.00	225	22	15	16	11½	9	8½	1	1	1
344B	46.00	325	26	16	17	13	9	10	1	1	1
344C	56.00	475	29	18¼	18	16	10	10	1	2	1
344D	75.00	700	32	22¼	22½	18	14	13½	1	2	1

SINGLE DOORS, Outside and Inside, with Cash Box

Nos.	Each	Weight Lbs.	Outside Measure, In. High	Wide	Deep	Inside Measure, In. High	Wide	Deep	Drawers	Pigeon Holes	Book Spaces
344E	$55 00	325	26	16	17	13	9	10	1	1	1
344F	65 00	480	29	18¼	18	15	10	10	1	2	1
344H	82 00	710	32	22¼	22½	18	14	13½	1	3	2
344K	100.00	1000	37⅛	26	25½	22½	16½	15½	1	3	3
344L	120 00	1225	41	28	28	26	18	14	1	4	3
344M	160 00	1700	45¼	31	28	25½	18½	13	2	3	3
344N	180.00	1900	47	31⅝	28	27½	19½	13	2	4	3
344P	200.00	1950	50⅛	32¾	29	29½	20½	14	2	4	3
344R	170 00	1700	50	31	28½	30	20	14½	3	6	3
344S	215.00	2100	52	33⅛	29	31½	21½	14	3	7	3

DOUBLE DOORS, Outside and Inside, with Cash Box

Nos.	Each	Weight Lbs.	Outside Measure, In. High	Wide	Deep	Inside Measure, In. High	Wide	Deep	Drawers	Pigeon Holes	Book Spaces
344AA	$270 00	2450	51	37	30	30	36	15	2	7	3
344BB	310.00	2800	55	40½	30	34	28	15	2	10	6
344CC	350 00	3150	68	38	30	48½	28½	15	3	12	5
344DD	340 00	2900	50¾	36½	30	39½	23½	15	3	8	5
344EE	370 00	3400	64½	42	31	43½	29½	16	4	11	5
344FF	380 00	3800	61¾	45½	31	39½	31½	16½	3	13	6
344HH	550 00	5400	72½	53½	32	60	40	17	4	25	9
344KK	700 00	6700	82	62	32	66	45	17	6	18	11

DOUBLE DOORS, Outside and Inside, with Cash Box

Steel Lined Inside with two ¼ in. Plates

For Jewelers and those having bulky valuables; for Notes and Collateral of Bankers; door and frame being felt packed to keep out explosives, these safes offer the highest form of protection against robbery or fire; Steel Inside Chests and Time Locks can be added.

Burglar Proof Inside Doors, both sets have combination locks, with detachable dials and built-in spindles; closing with pressure bars. The outside door is made of four ⅜ in. plates, two of drill-proof and two of Bessemer Steel; cabinets are usually made to order, otherwise the regular inside arrangement, as shown herewith, is used.

Nos	Each	Weight Lbs.	Outside Measure, In. High	Wide	Deep	Inside Measure, In. High	Wide	Deep
344LL	$730.00	3500	50¾	38½	29	30	26	14½
344MM	800 00	4300	54½	40½	32	34	28	15
344NN	1000 00	5900	70½	41½	33½	48	28	16½
344PP	830 00	4200	61¾	36½	32	39½	23½	15½
344RR	870.00	4900	65½	39½	32½	43½	25½	15½
344SS	920 00	5100	61½	45½	33	39½	31½	16½
344TT	1175.00	6300	73½	43½	33½	52	30	16
344WW	1700 00	9400	82	62	34	56	45	16

All Above are sold for Prompt Shipment from Factory

DECOYS

WOOD DECOY DUCKS

With Tack Eyes; Made of Selected, Thoroughly Seasoned White Cedar; Painted True to Life.

	Per Dozen
No. 1—Mallard	$10.00
No. 2—Canvas Back	10.00
No. 3—Red Head	10.00
No. 4—Blue Bill	10 00

With Glass Eyes; Otherwise Same as Above

No. 10—Mallard	$12.00
No. 20—Canvas Back	12.00
No. 30—Red Head	12.00
No. 40—Blue Bill	12.00

One Doz., 4 Females and 8 Males in a Crate

Weight 42 Lbs. per Dozen

DECOY ANCHORS AND BODY WEIGHTS

	Per Dozen
No. 152—Iron Decoy Anchors; Weight 4½ Lbs. per Dozen...	$1 50
No. 153—Oval Body Weights; Weight 4 Lbs. per Dozen	$2.00

FOLDING PAPER DUCK DECOYS

Waterproof, Light, Compact, Serviceable; a Dozen can easily be carried in a Hunting Coat Pocket.

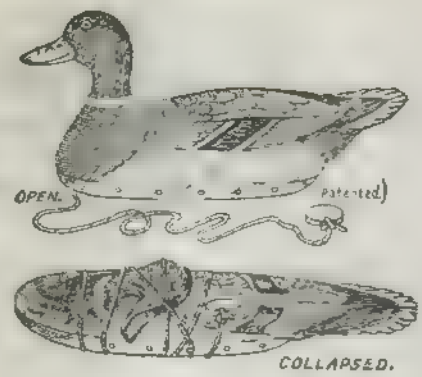
Bodies are printed on heavy Jute Cardboard, of very tough stock, and thoroughly Waterproofed to prevent absorbing moisture. Bodies are spread out by use of a bottom or floating board made of ¼ in. Pine which fits snugly in body of decoy when unfolded; Have pendulum weight of 1 oz. attached to bottom board; They are full size and perfectly colored; Bottom board is dyed water color and Waterproofed.

	Per Dozen
No. 25M—Mallard	$4.00
No. 25B—Blue Bill	4.00

Weight 4 Lbs. per Dozen

No. 26M—Extra Paper Bodies, for Mallard Decoys	$3.00
No. 26B—Extra Paper Bodies, for Blue Bill Decoys	3.00

Weight 1 Lb. per Dozen



AUTOMATIC CANVAS DECOY DUCKS

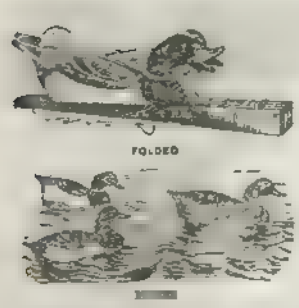
Expands automatically when anchor cord is unwound; packs in small space, light in weight; quickly collapsed; come right side whenever tossed into water; not affected by stray shots; Hand Painted. Complete with Anchors and Cord.

	Per Dozen
No. 6 Mallard	$12 00
No. 16 Blue Bill	12.00

One Dozen in a Neat Box, with Handle; 8 Males and 4 Females

Weight 14 Lbs. per Dozen

DECOYS



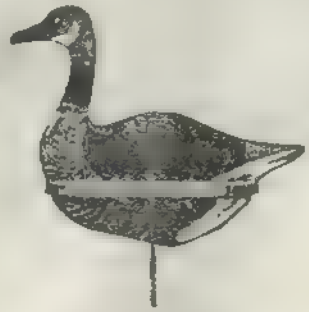
ILLINOIS RIVER FOLDING DUCKS

In Groups of Three, connected with a Hinge, allowing them to be set out with a Bird on each end of Frame, securely held in place with a spring; Complete with Anchor; when not in use can be Folded Flat; Made of Wood, Painted True to Life; Note how Light

	Per Dozen
No. 7—Mallard	$9.00
No. 8—Blue Bill	9.00

One Dozen Two-thirds Male, One-third Female, in a Neat Box with Handle Size 22x9x6½ in.

Weight 8 Lbs. per Dozen



FOLDING GEESE

Sheet Iron with latest Improved Legs and Neck, well painted

	Per Dozen
No. 1G—Profile Goose, without Wings	$12 00
No. 2G—Profile Goose, with Wings	18.00

One Dozen in a Case

Weight, without Wings 24 Lbs.; With Wings 30 Lbs

GRASS SUITS

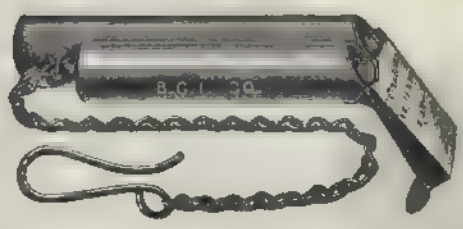
Suitable for Duck, Wild Goose, and all Kinds of Shore Bird Shooting; Make Perfect Artificial Blinds.

	Per Suit
Grass Suits—Consisting of Coat, Cape and Hood, all made of Long, Tough Marsh Grass; are Convenient to Wear and Shoot from; Practically Waterproof and Suitable for use in any Weather	$2.00

Weight 4 Lbs. Each

WHISTLES AND CALLS

DOG AND BICYCLE



UNIVERSAL DUPLEX

Per Dozen

No. 2—With Bent Mouth Piece, Nickel Plated, Has Chain and Hook for Fastening to Clothes..... $5 00

One Dozen in a Box; Weight 7 Oz. per Dozen

ECHO CALLS

Per Dozen

No. 620—Nickel Plated $4 00

One Dozen in a Box, Weight 9 Oz. per Dozen

BRITANNIA METAL

Per Dozen

No. 1—1⅝ in. Long.....$2.00

One Dozen in a Box

Weight 5 Oz. per Dozen

BRITANNIA METAL

Per Dozen

No. B2—1⅝ in. Long.....$2.00

One Dozen in a Box

Weight 10 Oz. per Dozen

HORN

Per Dozen

No. M2—2¾ in. Long; Curved Lip....$7.00

One Dozen in a Box

Weight 5½ Oz. per Dozen

DUCK CALLS

Will Imitate Various Calls of Mallard, Canvas Back, Red Head, Blue Bill, Pintail, Widgeon, Other Ducks and Crows

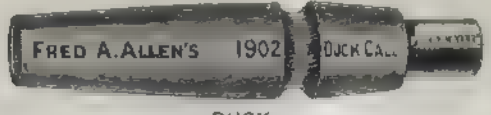
BROADBILL DUCK

Accurately produces any call of our native Ducks, from the short choppy call of the Teal to the long, dignified call of the Mallard Drake; Can be easily taken apart for cleaning.

Per Dozen

No. BC—Length 5¼ in.; Made in Two Pieces allowing the Reed to be securely fastened to one side by a Metal Clamp; the Reed is made of Mica; Carefully treated and practically indestructible $15 00

One Dozen in a Box; Weight 1¼ Lbs. per Dozen



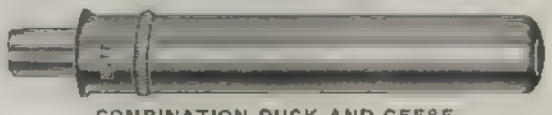
DUCK

Per Dozen

No. 1902—6½ in. Long; Made of Hardwood, Brass Lined, Nickel Tip $9 00

Half Dozen in a Box, Weight 2¼ Lbs. per Dozen

DUCK AND GOOSE CALLS

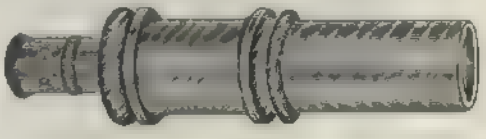


COMBINATION DUCK AND GEESE

Per Dozen

No. 5—5½ in. Long; Made of Spun Brass Nickel Plated; Improved Hard Rubber Reed, Various Notes are Sounded by Extending Inner Tube of Call to Exactly Represent Mallard, Canvas Back, Red Head, Blue Bill, Pintail, Widgeon, other Ducks, Geese and Brant..... $18.00

One Dozen in a Box; Weight 1½ Lbs. per Dozen



DUCK

Per Dozen

No. 4 4½ in. Long, Made of Varnished Hardwood, Nickeled Brass Tip, Improved Hard Rubber Reed.....$15 00

One Dozen in a Box; Weight 1½ Lbs. per Dozen

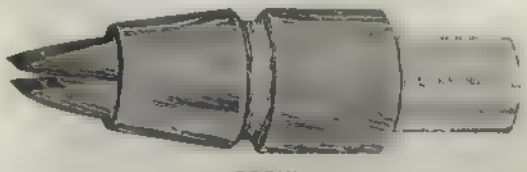
DUCK

Per Dozen

No. 720—4½ in. Long; Made of Cocobolo Wood, with Nickel Tip $6 00

One Dozen in a Box; Weight 1¼ Lbs. per Dozen

CROW CALLS



CROW

The most natural toned, easy blowing Crow Call made; Every Sportsman should help exterminate these pests which destroy our game birds, and their nests; There is no closed season on Crows

Per Dozen

No. 1915—Made of Hardwood, Brass Lined, Nickel Tipped, Length 4 in.....$9.00

One Dozen in a Box; Weight ½ Lb. per Dozen

HAND CARS AND VELOCIPEDES

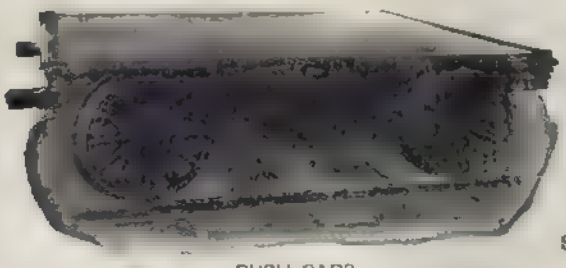
KALAMAZOO SECTION HAND CARS

Standard Gauge

Each

No. 1- Size of Platform 6x4½ ft. Improved Pressed Steel Wheels, Diam. 20 in., Diam. of Axles 1½ in., with 3 in. Bearings; Machine Cut Gears, Flexible Steady Box, Double Acting Brake; Wrought Walking Beam, Extra Strong Gallows Frame with Vertical and Diagonal Bracing, Bed Frame is made of Dry White Ash Gained and Thoroughly Bolted together, Braced Diagonally and Trussed with Longitudinal and Transverse Wrought Iron Rods against Sagging, etc., the Wheels have twice the Thickness of Metal at Throat of Flange and the Flange, than in the Tread, giving Double Wearing Qualities.....$50.00

Weight 510 Lbs. Each



PUSH CARS

For Ordinary Section Purposes, such as Carrying Ties, Dirt, Rails, Etc.

Each

No. 16—Size of platform 7x5⅔ Feet. Improved Pressed Steel Wheels, Diam. 20 in.; Diam. of Axles 1½ in., Brass Bearings; Frame and Deck made of Seasoned Hardwood, Ends Strapped with 2x⅜ in. Iron; Painted Brown.....$75 00

Weight 480 Lbs. Each

STANDARD GAUGE

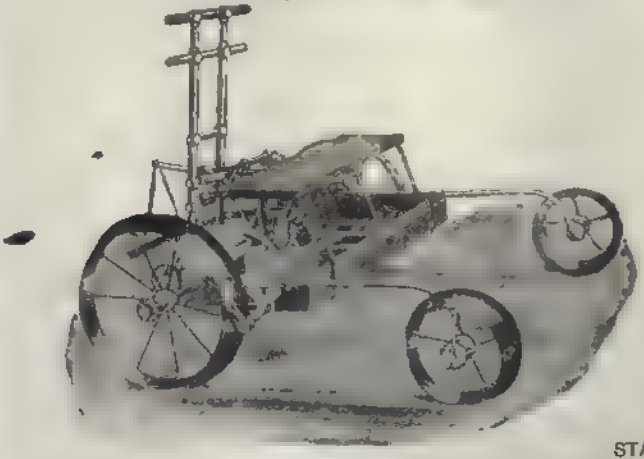
RAIL CARS

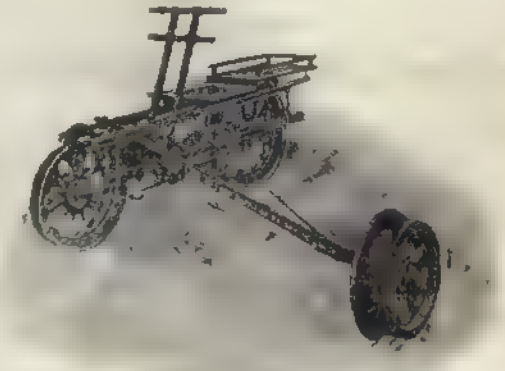
For use of Track Layers

Each

No. 8½—Size 8x8 Feet; Capacity 10 to 12 Tons. Sills covered by 3x½ in. Iron; Diam. of Wheels 16 in.; Diam. of Axles 2½ in., Ends of Bearings are Babbited; Two Rollers at Each End. Rail Plate Handling Rails; Has a Stout Hook at Each Corner for Hauling, also a Heavy Ring in the center of Each Side for Lifting with a Derrick.....$100.00

Weight 1450 Lbs. Each





STANDARD GAUGE

For Use of Lamp Lighters, Switch Tenders and for General Track Purposes, Fitted with Tray for carrying Packages, Tools, Lamps, etc.

4-WHEEL VELOCIPEDES

A Four Wheeled Machine is much safer than a Three Wheeled on Curves and on Wet or Frosty Rails, and runs easier.

Each

No. 7—Built to any Gauge; Geared 3¾ to 1; Suspension Spoke Wheels, Diam. 20 in.; Axles operate under Anti-Friction Rollers; Gear and Pinion have Machine Cut Teeth; equipped with Reliable Brake; will Carry Two Persons; operated by either one or both passengers.....$90 00

Weight 195 Lbs. Each

3-WHEEL VELOCIPEDES

Each

No. 12—Built to any Gauge; Wooden Frame; Wood Filled Wheels 20, 17 and 14 in. Diam.; Cut Gears, Highest Grade Ball Bearings; Arm Adjustable to Different Gauges, Supplied when so Ordered.....$60 00

Weight 150 Lbs. Each

Note—All Steel Frame and Steel Wheel Velocipedes can be furnished if desired, at slightly higher price.

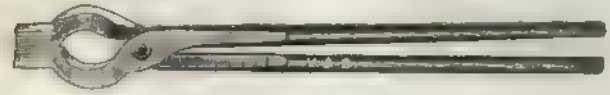
All Above, sold for Factory Shipment

BLACKSMITHS' TONGS

No 1360—STRAIGHT LIP PATTERN

Drop Forged, Solid Steel, Oil Finish; Used in all kinds of Forging

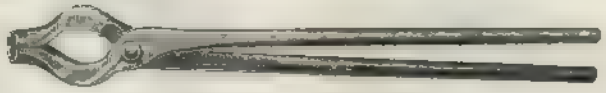
Length, In.	18	20	22	24	26
Weight Dozen, Lbs.	22½	30	36	45	50
Per Dozen	$6 70	7.20	7.70	8 90	10 60



No. 1390—GAD TONGS

Drop Forged, Solid Steel, Oil Finish; for General Forging Purposes

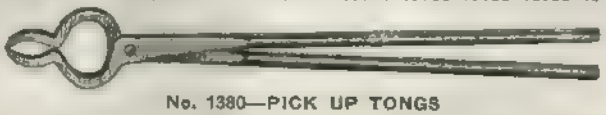
Length, In.	20	24
Weight per Dozen, Lbs.	27	41
Per Dozen	$10 50	13 50



No. 1370—BOLT TONGS

Drop Forged, Solid Steel, Oil Finish; Curved Lips for Molding Bolts and Round Iron

Size Bolt, In.	¼	⅜	⅜	½	⅝	¾	⅞	1
Length, In.	18	18	20	20	22	22	24	24
Wt. Dozen, Lbs.	22	24	25	27	32	34	38	40
Per Dozen	$10.00	10 00	13.50	13.50	15.00	15.00	16.80	16 80



No. 1380—PICK UP TONGS

For Picking Up Hot Irons; Drop Forged, Solid Steel, Oil Finish

Length, In.	22
Weight per Dozen, Lbs.	34½
Per Dozen	$15 00

All Above, Open Stock

OUTFITS OF BLACKSMITHS' TOOLS

Per Set

Outfit Complete; Weight 300 Lbs. **$80.00**

We have selected from our Regular Stock a Set of Blacksmiths' Tools best adapted to the needs of Farmers, Stockmen, Mechanics and all who wish to do their own repairing; An Outfit of this kind soon pays for itself in saving of Repair Bills alone; This Outfit contains all necessary Tools for repairing Wagons, Farm Implements and Tools, as well as for Shoeing Horses, etc.

Anvil—No. 4V, 60 Lb. Vulcan; Solid Tool Steel Face, Welded to Iron Body; Complete with Hardie.

Leg Vise—35 Lb., with Solid Box and Screw; Steel Jaws, Open 4 in.

Lever Forge—No. 150, with Shield; Diam. of Hearth 18 in., Diam. of Fan 8 in.; Weight 65 Lbs

Upright Drill—No. 152, with Slotted Table and Tool Shelf; Drills to the center of a 14 in. Circle and Bores from 0 to 1¼ in.; Three Feeds, Two Speeds; Weight 80 Lbs.

Round Shank Drills—No. 112, ½ in. Round Shank, One Each ⅛, 3/16, ¼, 5/16, ⅜, 7/16, ½ and 9/16 in.

Stock and Dies—No. 87B, Cuts ¼ to ⅝ in. Right Hand, 14, 18 and 22 Threads, 6 Taps, 3 Sets of Dies.

Cold Chisel—No. 3 Hartford, ⅝ in., 6 in. Long, Polished Bit and Head.

Tongs—No. 1360, Straight Lip Pattern, Oil Finish, 20 in. Long.

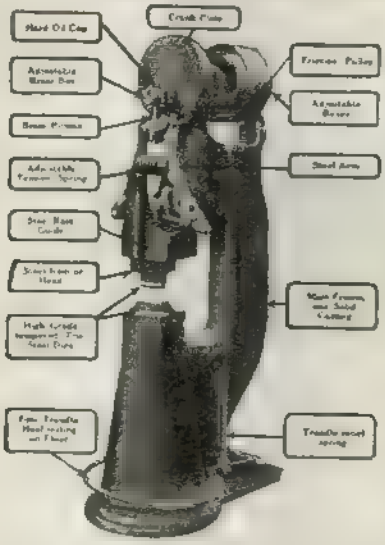
Pincers—No. 14, Tool Steel, 14 in. Long, Oil Finish.

Farriers' Knife—No. 410, Bone Handle, 4 in. Forged Blade; 8 in. Over-all.

Farriers' Hammers—No. HB12 Hartford, 12 Oz. Boston Pattern, Octagon Poll.

Blacksmiths' Hand Hammer—No. Z1, Zenith, Weight 2 Lbs., 1⅝x4½ in. Head.

LITTLE GIANT TRIP HAMMER



Used in Blacksmith and General Repair Work. The Main Frame is one Solid Casting; the Ram or Striking Head is a Steel Casting with Machined Bearings; It runs in a Pressed Steel Channel which is provided with means for taking up wear.

The Dies are made of High Grade Tempered Steel and are placed in Machined Seats

They are held in place by Dowel Pins and Keys. The Connecting Arms and Adjusting Knuckle are Steel Castings. The raising or lowering of the Knuckle adjusts the Hammer for work on large or small material. The Friction Device is operated by a Tread or Foot Lever provided with a Spring for releasing the Friction automatically

The Dies furnished with the Hammer are adapted for General Blacksmith and Repair Work. Special Dies furnished on special order.

Lbs.	25	50	100	250
Will Forge Stock up to.	1½ Sq. or 3 Rd.	2 Sq. or 2½ Rd.	3 Sq. or 4 Rd.	5½ Sq. or 7 Rd.
Upper Die, Size Face, In.	1½x3	1¾x3½	3x6	3½x8
Lower Die, Length Base, In.	2x3	2½x3½	3x6	3½x8
Lower Die, Length Base, In.	5	5½	6	8
Variable Length Stroke, In.	6 to 7	8 to 11	9 to 12	12 to 16
Throat Room, In.	6	6	7¾	8
Weight of Steel Ram, Lbs.	25	50	100	250
Weight Hammer,Com., Lbs.	800	1600	3300	5000
Height Over-all.	5 ft. 4 in.	5 ft. 11 in.	6 ft. 6 in.	7 ft. 3 in.
Floor Space Required, In.	16x27	20x30	28x42	30x54
Belt Pulley, Size, In.	3½x10	4x12	5x14	8x18
Revolutions per Minute.	400	350	300	200
Estimated H. P. Required.	¾	1½	2½	4
Each	$200.00	300 00	600.00	1200 00
Complete with Motor, Each	450.00	600.00	950.00	1650.00
Motor H. P.	1	2	3	5
Extra Weight, Motor Equipment, Lbs.	180	260	310	460

Motor quotations include 110 or 220 Volt, 3 Phase, 60 Cycle, 1200 Revolutions per Minute, Alternating Current Motors; Quotations by request on other Alternating Current or Direct Current Motors

Special Dies for any Forging purpose; Prices quoted on receipt of drawings or sample of work to be done.

All sales made subject to return at Factory expense within 30 days after arrival of shipment if for any reason unsatisfactory to purchaser.

KLAXON HORNS

Klaxon is the most startling and effective Warning Signal ever devised for Automobiles or Motor Boats, It is Far More Powerful and can be heard further than any other Horn or Whistle and by reason of its peculiar attention compelling Tone, it dominates all other sounds; the Note of the Klaxon is a true Warning Note; It is not pleasant to hear, but it at once expresses and is instinctively understood as meaning danger, It cuts through every other sound, It is heard and heeded and without confusion and without hesitation; On still air it may be heard a mile under ordinary road conditions it Warns effectively a quarter of a mile or more.

The Klaxon is a mechanical noise machine operated by electricity. Its sound is produced by a tough vanadium Steel Diaphragm, set in Rapid Vibration by means of a Hardened Tooth Wheel or Rotor operated by a finely constructed Electric Motor, Motor is a Railway Motor in miniature with a Laminated Seven Coil Armature and a Commuter of Standard Type, Klaxon Horns are dust and waterproof, Can be cleaned with a Hose without danger or damage; Each Electric Horn is supplied with Push Button to match Finish of the instrument and 10 ft. of Double Covered Insulated Wire. Purchasers of Klaxon Horns are protected by the manufacturers Permanent Guarantee—not one, two or three years—permanent.

TYPE L KLAXON

This is the original Klaxon with the Long Projector and is the only Horn made that is thoroughly in keeping with the large and more expensive Cars on the market. Has a very deep note. Its Diaphragm is Vibrated by a Toothed Wheel. This Wheel is rotated by an Electric Motor. Each Double Vibration means One Tooth of the Glass Hard Steel Wheel slips past the Glass Hard Steel Button on the Diaphragm causing a Sharp, Clean Cut Warning Note, totally unlike the noise of all other Horns.

Each

No. 1—Type L; All Black; Complete with Push Button and Wire.....$20.00

One in a Box; Weight 20 Lbs. Each

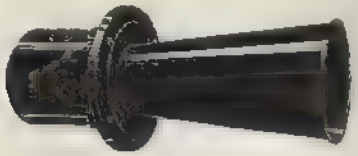
TYPE U H KLAXET

A Steel Diaphragm Vibrated by an Electric Motor produces the true Klaxon Warning Note Abrupt, Imperative and to the Point; It is thoroughly well made and Reliable and is sold under the Regular Klaxon Guarantee; Requires Four to Six Dry Cells to operate; Can be installed under the Hood or Outside

Each

No. 3—Type U H Klaxet; All Black; Complete with Push Button and Wire.....$12.00

One in a Box; Weight 5 Lbs. Each



TYPE U H KLAXON

Same as the Type L Horns in construction and tone; Has Torpedo shaped Bell and is intended for use under the Hood; the Sound is particularly far-reaching

Each

No. 4—Type U H Klaxon; All Black; Complete with Push Button and Wire.....$6.00

One in a Box, Weight 10 Lbs. Each

U H KLAXET, DECK TYPE

Made with the same Horn as the Type U H Klaxet, but has a Swivel Base which permits the Horn being faced in any direction or removed instantly; Used extensively on Motor Boats.

Each

No. 5—U H Klaxet, Deck Type, All Black, Complete with Push Button and 10 ft. Insulated Wire.....$7.50

One in a Box; Weight 6 Lbs. Each

HAND KLAXONET

A real Klaxon; Has all of the Klaxon Tone and Quality. Operates on an entirely new and novel principle; the Plunger is very short; a slight push gets immediate response and a very Loud Tone.

Each

No. 7—Hand Klaxonet; All Black.....$3.00

One in a Box; Weight 5 Lbs. Each

HAND KLAXONET

For Motorcycles

Same as the Regular Hand Klaxonet with Short Bell on Motorcycle Bracket

Each

No. 10—Hand Klaxonet, for Motorcycles; All Black.....$3.00

One in a Box; Weight 5 Lbs. Each

AUTOMOBILE HEAD LIGHTS

ELECTRIC HEAD LIGHTS

Projects an intense light for a quarter of a mile ahead. The most powerful electric Head Light made. Body is drawn from one piece of heavy brass and there are no seams or loose parts. The finish is fireproof black enamel and will not blister or crack under any ordinary conditions. The design is artistic and the combination high finish and heavy nickel plating makes this lamp very handsome and attractive. Fitted with Adjustable Focusing Device.

Per Pair

No. 11½—Black Enameled; Has Heavy Hexagon Door; Silver Plated Parabolic Reflector; Outside Diameter 11½ in.; Depth 6½ in.; Bracket Centers 8¼ in.; Complete with [illegible] $11.50

One Pair in a Box; Weight 10½ Lbs. per Pair

FORD ELECTRIC HEAD LIGHTS

This is a Popular Priced Bullet Type Electric Headlight, designed for use on Ford and other Cars of similar size; Seamless body fitted with Adjustable Focusing Device; Can be furnished with Bracket for 1915 and 1916 Fords

Per Pair

No. 916—Black Enameled; Outside Diameter 9 in., Depth 5½ in.; Bracket Centers 7 in.; Complete with Bulbs.....$7 20

No. 916A—Same as No. 916, with 1915 or 1916 Ford Brackets 7.80

One Pair in a Box, Weight 9½ Lbs. per Pair, Boxed

ELECTRIC SIDE LAMPS

This is a high grade Bullet Type Electric Side Lamp with Roll Doors; Has a Heavy Silver Plated Inside Lining and Parabolic Reflector.

Per Pair

No. 6—Black Enameled, Adjustable Focusing Device, Diam. 6 in.; Complete with Bulbs $7.00

One Pair in a Box; Weight 4½ Lbs. per Pair, Boxed

OIL TAIL LAMPS

Nos. 24 and 240 have Crystal and Ruby Lenses of the Semaphore Type and large White Glass shwing Number.

Each

No. 24—Oil Only; Black Enameled Finish; Diam. of Door 4 in.; Door is held by Double Lock.....$3 00

No. N24A—Same as No. 24, with 1915 or 1916 Ford Brackets 3 00

No. 240—Combination Oil and Electric; Fitted with Ediswan Socket, Otherwise same as No. 24 Above..... 3.50

One in a Box; Weight 1½ Lbs., Boxed

8 IN. GAS HEAD LIGHTS

Latest Model, Close Coupled Type; is larger in front than Comparative Sizes of other Lamps; the Body and Flare are drawn from One Piece of Heavy Gauge Brass and will stand hard usage; Easy to Clean and will give a most brilliant Light.

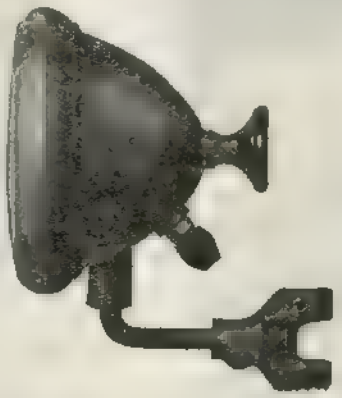
Per Pair

No. 108—Black Enameled; Outside Diam. 8 in.; 5 in. Mirror; Bracket Centers 6¼ in.; Depth 5½ in $9.00

One Pair in a Box; Weight 8½ Lbs. per Pair, Boxed

No. 110—Outside Diam. 10 in., Otherwise same as above.... 12.00

One Pair in a Box; Weight 13½ Lbs. per Pair, Boxed



ELECTRIC SPOTLIGHT

May be fastened to the Wind Shield or Fore Door; Universal Bracket permits the light to be thrown in any direction; Diminishing Mirror in Handle; Switch Socket, True Parabolic Reflector, Inside Focusing Device.

Each

No. 616—Black Enameled, with Nickel Rim; Diam. 6½ in...$6.00

One in a Box; Weight 3 Lbs. Each

ELECTRIC SIDE LAMPS

A distinct Ford Type; Bullet shape round Door, Plain Glass, with Regular Bracket or to fit 1915 or 1916 Ford

Per Pair

No. 917—Black Enameled; Diam. 4½ in.; Regular Bracket $5.00

No. 917A—Same as No. 917, with 1915 or 1916 Ford Bracket 5.00

Weight 5½ Lbs. per Pair

OIL SIDE LAMPS

Large Crystal Glass of Semaphore Type; Glass is held in place by Snap Ring.

Per Pair

No. 26—Oil Only; Black Enameled Finish; Diam. of Door 3⅞ in.; Door is held by Double Lock, Snap Spring and Knurled Nut.....$5.50

No. 260—Combination Oil and Electric; Fitted with Ediswan Socket, Otherwise same as No. 26 above..... 7.00

One Pair in a Box; Weight 4½ Lbs. per Pair, Boxed

ELECTRIC TAIL LAMPS

Has Convex Semaphore Lenses and White Side Light to Show Number; Combination Prop for either Round or Flat Bracket.

Each

No. 32C—Black Enameled, with Nickel Ring; Diam. 4½ in.....$1.50

No. 32D—Same as above, with 1915 or 1916 Ford Bracket..... 1.50

One in a Box; Weight 1 Lb. Each

LOOSE SLEIGH BELLS

No. 98A—COMMON; POLISHED RIM, CAST BRASS

Size Nos.	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Diam., In.	1⅛	1¼	1⅜	1½	1⅝	1¾	1⅞	2⅛	2¼	2⅜	2½	2⅝	2⅞	3
Wt. Doz., Lbs.	⅞	1	1⅛	1⅜	1⅝	2	2½	3	3½	4	4½	5	6	6¾
Per Dozen	$0 52	.72	98	1.12	1.38	1.50	1 80	2.00	2 70	3.20	3 60	4 20	4.80	6.00

Open Stock

TEAM BELLS

RIVETED LOOP

Stamped Steel Body; Malleable Iron Loop Securely Riveted to the Bell; Uniform in Tone; will not Crack; Diam. 3⅜ in.

The Tongue is suspended from a portion of the loop that extends through the Bell, making it very strong and no danger of its working loose and falling out.

	Per Dozen
No. 98F—Nickel Plated	$3 30
No. 98H—Copper Plated	3.00

Weight 4¼ Lbs. per Dozen
Open Stock

No. 99A—LOOP, CANADA PATTERN

Cast Brass Loop

Both the Top and under Loops are attached to the Bell in such a manner that they cannot work Loose; Bell is made of Brass, is Light and Handsomely Polished

Size Nos.	3	4	5	6
Diam., In.	2⅞	2⅞	3¼	3⅝
Wt. Dozen, Lbs.	4⅛	5⅛	7	8⅛
Per Dozen	$3 80	5.20	6 40	7.60

NUT, CANADA PATTERN

Tongue is attached so that it cannot come loose. Bolt and Nut for Fastening through Hole in Strap. Bell is made of Brass, Light and Finely Polished.

Size Nos.	3	4	5	6	7	8
Diam., In.	2⅛	2⅞	3¼	3⅝	3¾	4
Wt. Doz., Lbs.	4⅛	5⅛	7	8⅛	8⅛	10
Price per Dozen						
Polish. Brass	$3.30	4.50	5.50	6.50	7.20	8.00
White Metal	3.50	4.60	6.00	7.20	7.50	..

BELL FRAMES

Wrought Iron; for Above Bells

	Per Pair
To hold 5 Bells	$3 00

Weight 10 Lbs. per Pair

CARRIAGE, SLEIGH AND AUTOMOBILE HEATERS

Used by Liverymen, Rural Mail Carriers, Farmers, Automobilists and all who drive

Each

No. 7D—Clark's, 14x7½x4⅜ in., Slanting Flat top; Covered with Brussels Carpet; Cold Rolled Steel Ends, Nickel Plated Adjustable Side and End Ventilators. $3 50

One in a Box; Weight 7 Lbs. Each

Each

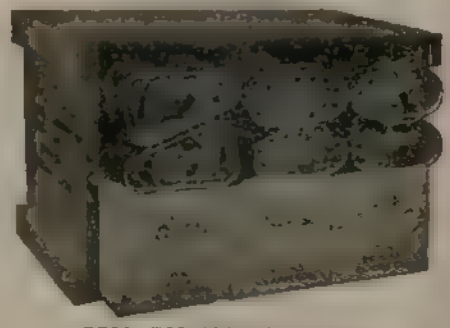
No. 3D—Clark's 14x7¼x3⅝ in.; Covered with Rich Dark Green Brussels Carpet with Braid Bound Edges; Frame Strongly Reinforced; Stamped White Metal Ends; Asbestos Lined..... $3 00

Weight 5½ Lbs. Each

No. 5B—Clark's, a Popular Low Priced Heater, Size 12x7x3½ in.; Covered with Brussels Carpet; White Metal Ends..... 2.50

Weight 4½ Lbs. Each

Directions:—Place a piece of Clark's Coal Brick in a brisk fire until red through and through, then take out and leave for a few seconds until the little flame dies away. Place in metal drawer and insert in heater. Can be extinguished with water and used again until entirely consumed.



PEERLESS ASSORTMENTS

Per Asst

No. 12—Assortment contains Two No. 5B Oval Heaters, Two No. 3D Oval Heaters, Two No. 7D Triangular Heaters; and Six Dozen Clark Coal Bricks of the best grades. $24 00

One Assortment in a Case

Weight 76 Lbs. per Assortment

CLARK COAL BRICKS

Burns without Smoke, Flame, Soot or Odor; a Full Cake will burn from 12 to 15 Hours; One-third of a Cake is enough for an ordinary drive.

Size 7½x2½x1⅛ in.

IN PACKAGES	Per Dozen
No. 1—First Grade...	$1 30
No. 2—Second Grade	1 10

One Dozen Cakes in a Package

Weight 7 Lbs. per Dozen

In Cases 10, 12 and 18 Dozen Bricks

IN CASES OF 100 CAKES	Per Case
No. 101—First Grade.	$10.00

Weight 60 Lbs. per Case

LEADER ASSORTMENTS

These Clark Leader Heaters are 12 in. Long, Oval Shape; Made entirely of Metal, not covered; well made, Strongly Riveted.

Per Asst.

No. 625—Assortment contains 6 Leader Heaters and Six Dozen A, B, C, Coal Bricks $15 00

One Assortment in a Case

Weight 76 Lbs. per Assortment

MACHINE AND HAND THREADS

BARBOUR'S LANDIS LOCKSTITCH

Extra Strong; For use on all Lockstitch, Landis, National or other Machines; Used for Sewing Leather, in new or repair work.

LINEN; SOFT FINISH

	Per Pound
No. 32—Gray; 3, 4, 5, 6, 7 and 8 Cord	$4.30
No. 34—Dark Blue; 3, 4, 5, 6, 7 and 8 Cord	4.60
No. 36—Yellow; 3, 4, 5, 6, 7 and 8 Cord	4.90

LINEN; HARD FINISH

No. 34H—Dark Blue; 3, 4, 5, 6, 7 and 8 Cord	4 60

One Pound in a Ball

LANDIS GREEN LABEL MACHINE THREAD

Size 4, 5, 6, 7 or 8 Cord

	Per Pound
No. 28—Gray Linen	$4.30
No. 30—Dark Blue Linen	4 60

BARBOUR'S MACHINE; LINEN

3 Cord; 2 Oz. Spools

For Stitching Blinds and Fronts and Fine Work

	Per Pound
No. 18W —Coarse; White	$5 00
No. 18B —Coarse; Black	4 40
No. 25W —Medium; White	5 [illegible]
No. 25B —Medium; Black	4 [illegible]
No. 25BN—Medium; Brown	5 [illegible]
No. 250 —Medium; Orange	5 [illegible]
No. 25Y —Medium; Yellow	5 [illegible]
No. 25G —Medium; Green	5 [illegible]
No. 25R —Medium, Red	[illegible]
No. 40W —Fine, White	6 [illegible]
No. 40B —Fine, Black	4 90

One Pound in a Box

SILK MACHINE THREAD

BELDING BROS. SILK MACHINE THREAD

		Per Spool
No. EW	White	$ .80
No. EB	Black	.70
No. EM	Maroon	1.70
No. EG	Green	.70

One Ounce on a Spool

SILK FINISH COTTON MACHINE THREAD

Used extensively in the manufacture of Tents, Awnings and all kinds of Canvas Goods; also used on light Leather Work, Bridle Fronts Cushions, etc.

Nos.	Color	Size	Yds. on Spool	Per Spool
64W	White	No. 12-4 Cord	6000	$6 00
64B	Black	No. 12-4 Cord	6000	5.60
96R	Red	No. 24-3 Cord	9600	8 00

One Spool in a Box; Weight 3¼ Lbs. per Spool

Nos.	Color	Size	Yds. on Spool	Doz. Spool
512W	White	No. 12-4 Cord	600	$7 20
524W	White	No. 24-4 Cord	600	6 20
512B	Black	No. 12-4 Cord	600	8 00
524B	Black	No. 24-4 Cord	600	6.70
512M	Mode	No. 12-4 Cord	600	10 50
512G	Green	No. 12-4 Cord	600	10 50
524R	Red	No. 24-4 Cord	600	8 60

Two Dozen Spools in a Box

SADDLERS' SILK

Out of Stock

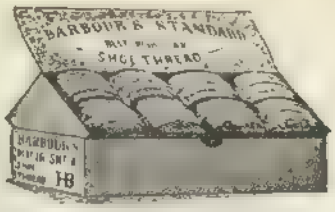
SADDLERS' SILK

	Per Bunch
No. 46—For Braiding Whip Snaps or Crackers; Assorted Colors; ½ Oz. in a Bunch	$0 40

SAIL TWINE

	Per Pound
No. 44—8 Ply Sail, White	$1.00

Half Pound Balls; Three Pounds in a Package



LINEN HAND

For Hand Sewing; Made of Best Irish Flax, Perfectly Smooth, and Free from Weak Spots; Used by Shoe Makers and Harness Makers. Makes Extra Strong Wax Ends.

BARBOUR STANDARD
Half Bleached, White

Nos.	10W1	10W2	3W2	12W1	12W2
Wt. of Balls	1 Oz.	2 Oz.	2 Oz.	1 Oz.	2 Oz.
Per Pound	$3 50	3.50	3 70	4 20	4 20

	Dark Blue		Yellow	
Nos.	3B1	12B1	12Y1	3Y1
Wt. of Balls	1 Oz.	1 Oz.	1 Oz.	1 Oz
Per Pound	$4 00	4.40	4 80	4 40

AMERICAN STANDARD
Half Bleached, White

Nos.	10A1	10A2
Weight of Balls	1 Oz.	2 Oz
Per Pound	$3 00	3 00

One Pound in a Box

CABLE LINEN
Hand Thread, White

	Per Pound
No. 10C —1 Oz. Balls	$2 50

BLACK HARNESS WAX
Bulk; In One Ounce Balls
Nos. 50W, 50M, 50S, LL

Nos.	50W	50M	50S
Kind	Winter	Medium	Summer
Per 100 Balls	$1 10	1.10	1.10

MACHINE WAX
Bulk; In One Lb. Balls

Nos.	52B	52W
Color	Black	White
Per Pound	$0.14	.20

BEESWAX Per Doz. Cakes

No. 54—1 Oz. Cakes, Commercial	$ 0.80
No. 56—1 Lb. Cakes, Commercial	10.80
No. 58—1 Lb. Cakes, Pure Refined	15.60

Three Dozen Cakes in a Box

BRISTLES

	Per Doz. Bunches
No. 60 -24 Bristles in Each Bunch	$3.50
	Per Package
No. 62—One Ounce in Each Package	$4 00

HARNESS REPAIR KITS

LUMBERMEN'S

	Per Dozen Kits
No. 48—Consists of 1 Patent Sewing Awl Haft, 2 Bent and 2 Straight Sewing Awls, 4 Harness Needles, 1 Ball Each Shoe Thread and Wax; Each Kit on a Strip of Leather, Size 3x7 in.; Weight ½ Lb. Each	$8 00

OAK MANTEL CLOCKS

EDNA

ELVIRA

ESTHER

Elite Assortment All, Height 24 in ; 6 in. White Dial, Oak Case, Eight-Day; Half Hour Strike on Wire Bell, Packed Six in a Case; Two of Each Pattern

WITH ALARM	Each
No. 2700—Elite Assortment, Two of Each	$31.80
No. 15—Edna	5.30
No. 16—Elvira	5.30
No. 17—Esther	5.30

WITHOUT ALARM	Each
No. 2400—Elite Assortment, Two of Each	$29.10
No. 18—Edna	4.85
No. 19—Elvira	4.85
No. 20—Esther	4.85

Weight 70 Lbs. per Assortment

AMERICAN CUCKOO CLOCKS

Fitted with Solid Brass Chain and Weight Movement; Half or Quarter Hour Strike and Cuckoo Call; Weights are Japanned and Gilt, made to imitate Pine Cones

The American Cuckoo Clocks, illustrated on this page, combine all the advantages of the Foreign Movement with Domestic Case.

The Cases are superior to those imported as the Wood is carefully selected and Seasoned by an Air-Drying Process which prevents warping or cracking

The Designs are Staunch and Artistic, they are not frail and delicate and will not fall apart in the home, which frequently happens with the imported Clocks

Each

No. 570—Height 23½ in.; Quarter Hour Strike; Cuckoo and Quail Call...$37.00
Weight 26½ Lbs Each

Each

No. 509½—Height 18½ in.; Half Hour Strike; Cuckoo Call.....$21 00
Weight 15 Lbs Each

Each

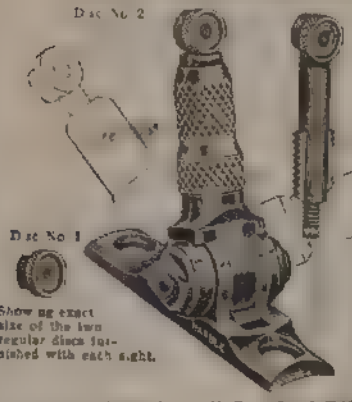
No 508½—Height 18 in.; Half Hour Strike; Cuckoo Call..... $18 00
Weight 16 Lbs. Each

No 504 Height 21 in Half Hour Strike, Cuckoo Call..
Weight 15 Lbs Each

Each
$12 20

GUN SIGHTS

When Ordering Sights, Always give Make, Model and Caliber of Rifle; Also state whether Straight or Pistol Grip



MARBLE AUTOMATIC FLEXIBLE JOINT REAR PEEP

This Sight has a flexible joint Stem which always retains its [illegible] position for shooting [illegible] forward [illegible] with a [illegible] large and small aperture discs [illegible] Target [illegible] shown in the [illegible] sight [illegible] adjustment of [illegible] both ways. By turning the sleeve, [illegible] elevated [illegible] and locked. When not in use, stem can be folded down and locked in that position.

Point blank [illegible] can be raised by [illegible] in slotted stem socket

Each

No. M2—Adapted to all Standard Rifles and Carbines (see Nos. M20, M21 and M32); Can be used with any Front Sight..$3.00

MARBLE AUTOMATIC FLEXIBLE JOINT REAR with Special Base

Each

No. M20—Made with a Long Arm Base, to be used on Rifles that have a Long Firing Bolt; otherwise as No. M2.....$3 00

MARBLE SIMPLEX REAR SIGHT

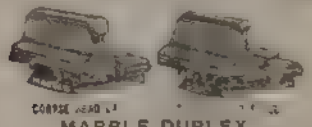
A Good Sight at a Low Price Each

No. MRS—Adapted only to 22 Caliber Rifles, with exception of Remington Models 12 and 16A..... $1.50

MARBLE ADJUSTABLE LEAF, MIDDLE

Has Folding Leaf, with Blued Steel Center, which gives a clear alignment of other sights; Center can be adjusted to any elevation; is also reversible, having a V Notch for use with Rocky Mountain Front Sights and a Half Round Notch for use with Bead Front Sights. Each

No. M60—Adapted to all Rifles having a Rear Slot in Barrel.....$1.00



MARBLE DUPLEX

Two Sights in One Each

No. M57—⅛ in. Gold Bead and ⅛ in White Enameled Bead $1.50

MARBLE TARGET DISCS

Each

No. M5—With Small Aperture. Fits Nos. M2, M20 and M21 Rear Sights. $0.50

MARBLE FLEXIBLE REAR PEEP

For Model 1899 Savage

Each

No. M21—This Sight has Long Base, Suitable for Savage Rifles only; otherwise same as No. M2..... $3.00

MARBLE SIDELIGHT DISCS

The Sidelight Enables the Eye to more Readily find the Center Aperture; Fits Nos. M2, M20 and M21 Rear Sights.

Each

No. M3—With Small Aperture $0.50

No. M4—With Large Aperture ..... .50

MARBLE SPECIAL REAR PEEP

For Remington .22 Repeater

Each

No. M22—This Sight has Long Base, Suitable for Remington Rifles only; same as M2 except it does not have Flexible Joint Stem....$3.00

MARBLE STANDARD BEAD FRONT

Adapted to all Standard Rifles that have a Front Slot in Barrel
Can be used with any Rear Sight

Each

No. M30—⅛ in. Ivory Bead.....$1 00
No. M31—⅛ in. Ivory Bead..... 1 00
No. M32—⅛ in. Ivory Bead..... 1.00
No. M33—⅛ in. Gold Bead..... 1 00
No. M34—⅛ in. Gold Bead..... 1 00
No. M35—⅛ in. Gold Bead..... 1 00

MARBLE IMPROVED BEAD FRONT

Enables Shooter to see under as well as over the bead, a very desirable feature as it permits shooting as long range with out adjusting rear sight.

Adapted to all Standard Rifles having a Front Slot in Barrel, can be used with any Rear Sight.

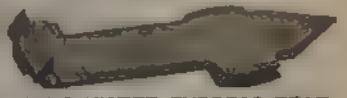
Each

No. M50—⅛ in. Ivory Bead .. .$1 00
No. M51—⅛ in. Ivory Bead . . 1 00
No. M52—⅛ in. Ivory Bead . 1 00
No. M53—⅛ in. Gold Bead . 1 00
No. M54—⅛ in. Gold Bead 1 00
No. M55—⅛ in. Gold Bead . 1.00

WINCHESTER LEAF, CARBINE REAR

Each

No. W3—Has Folding Leaf Graduated to 1,000 yds., specially suited for Carbines, but can be used on any Standard Rifle having a Rear Slot in Barrel, can be used with any Front Sight ... $1 50



WINCHESTER EXPRESS REAR

Each

No. W4—Has Three Folding Leaves, allowing Sight to be adjusted for any Range; made in Different Heights for all Standard Rifles having Rear Slot in Barrel; can be used with any Front Sight... $2 00

SPECIAL MARBLE SIGHTS

Each

No. 894—⅛ in. Ivory Bead, for Model 94 Winchester Carbine.. $0 50

No. 894B—⅛ in. Ivory Bead, for Model 94 Winchester Carbine. .50

No. 894G—⅛ in. Gold Bead, for Model 94 Winchester Carbine. .50

No. 16—⅛ in. Ivory Bead, for Savage Featherweight, including Hipower and 250-3000 .. .. .50

No. 16B—⅛ in. Ivory Bead, Otherwise same as No 16 . . $0 50

No. 16G—⅛ in. Gold Bead, Otherwise same as No. 16. .50

No. 896R—⅛ in. Ivory Bead, for 1895 Model Winchester .. 50

No. 94B—⅛ in. Ivory Bead, for Model 92 Winchester Carbine .50

No. 94C—⅛ in. Ivory Bead Sight, with Special Base for Model 94 Winchester Carbine ..... .75

MARLIN, ROCKY MOUNTAIN REAR

Hunting Sight, can be rapidly adjusted to any range; adapted to all Standard Rifles having a Rear Slot in Barrel; can be used with any Front Sight

Each

No. 100—Small Size $1 00
No. 101—Large Size..... 1 00
No. 102—Extra Elevators for Above..... 25

Sporting and Rocky Mountain Rear Sights are not made for and cannot be used on Carbines

WINCHESTER SPORTING REAR

Each

No. W5—Hunting Sight, can be quickly adjusted to any Range; Adapted to all Standard Rifles having a Rear Slot in Barrel; Can be used with any Front Sight.. $1 00

No. WF5—With Flat Top, instead of V Crotch Otherwise same as above .. 1 00

No. W90—Sporting Rear Sight, for Models 90 and 1906 Winchester . .. 1.00

No. W6—Extra Elevators, for above .. 25

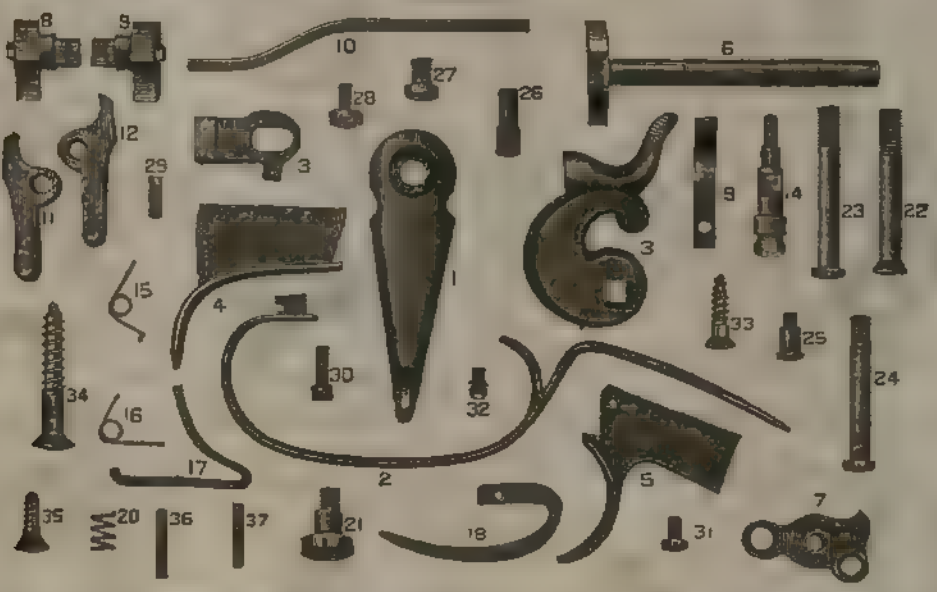
Complete Directions for Putting on and Adjusting are Sent with Every Sight

COMPONENT PARTS OF SHOT GUNS

FOR TWIN PORTS FIRE ARMS COMPANY SHOT GUNS

In Ordering, Give Name of Gun and Name and Number of Parts

HAMMER



Nos.	Each
1—Top Lever	$0 75
2—Guard	60
3—Hammer	50
4—Left Trigger	50
5—Right Trigger	50
6—Extractor	50
7—Bridle	50
8—Right Tumbler	50
9—Left Tumbler	50
10—Main Spring	10
11—Right Sear	25
12—Left Sear	.25
13—Locking Bolt	30

Nos.	Each
14—Firing Pin	$0 25
15—Right Sear Spring	15
16—Left Sear Spring	15
17—Lever Spring	25
18—Fore-end Catch	.15
19—Fore-end Catch Spring	10
20—Firing Pin Spring	10
21—Top Lever Screw	10
22—Upper Tang Screw	10
23—Side Plate Screw	10
24—Lower Tang Screw	10
25—Bridle Screw	10
26—Extractor Screw	.10

Nos.	Each
27—Trigger Plate Screw	$0 10
28—Fore-end Catch Spring Screw	.05
29—Firing Pin Screw	.10
30—Adjusting Screw	10
31—Sear Spring Screw	05
32—Sight	.15
33—Guard Screw	10
34—Butt Plate Screw	05
35—Fore-end Iron Screw	05
36—Extractor Guide Pin	05
37—Fore-end Catch Pin	05
Stock	5 00
Fore-end	1.50

HAMMERLESS

Nos.	Each
1—Side Plate	$1 00
2—Guard	60
3—Top Lever	.75
4—Locking Bolt	30
5—Right Trigger	50
6—Left Trigger	50
7—Hammer, Right or Left	50
8—Right Sear	25
9—Left Sear	.25
10—Trigger Plate	1 00
11—Extractor	50
12—Safety Block	25
13—Push Rod	20
14—Fore-end Iron	75
15—Safety Button	25
16—Safety Block Post	20

Nos.	Each
17—Top Lever Spring	$0 25
18—Firing Pin	20
19—Safety Button Spring	20
20—Top Lever Screw	10
21—Sear Spring	20
22—Fore-end Catch	15
23—Fore-end Catch Spring	10
24—Main Spring	10
25—Compression Plunger	15
26—Sear Pin	05
27—Upper Tang Screw	10
28—Side Plate Screw	10
29—Lower Tang Screw	10
30—Extractor Screw	10
31—Firing Pin Screw	10
32—Fore-end Catch Spring Screw	10

Nos.	Each
33—Safety Button Spring Screw	$0 10
34—Safety Slide Screw	10
35—Trigger Plate Screw	.10
36—Firing Pin Screw	10
37—Guard Screw	10
38—Adjusting Screw	10
39—Hammer Pin	10
40—Guard Pin	10
41—Extractor Catch Pin	05
42—Safety Button Pin	05
43—Safety Slide	30
44—Safety Block Pin	05
45—Compression Plunger Pin	05
46—Sight	05
Stock	6 00
Fore-end	1 50

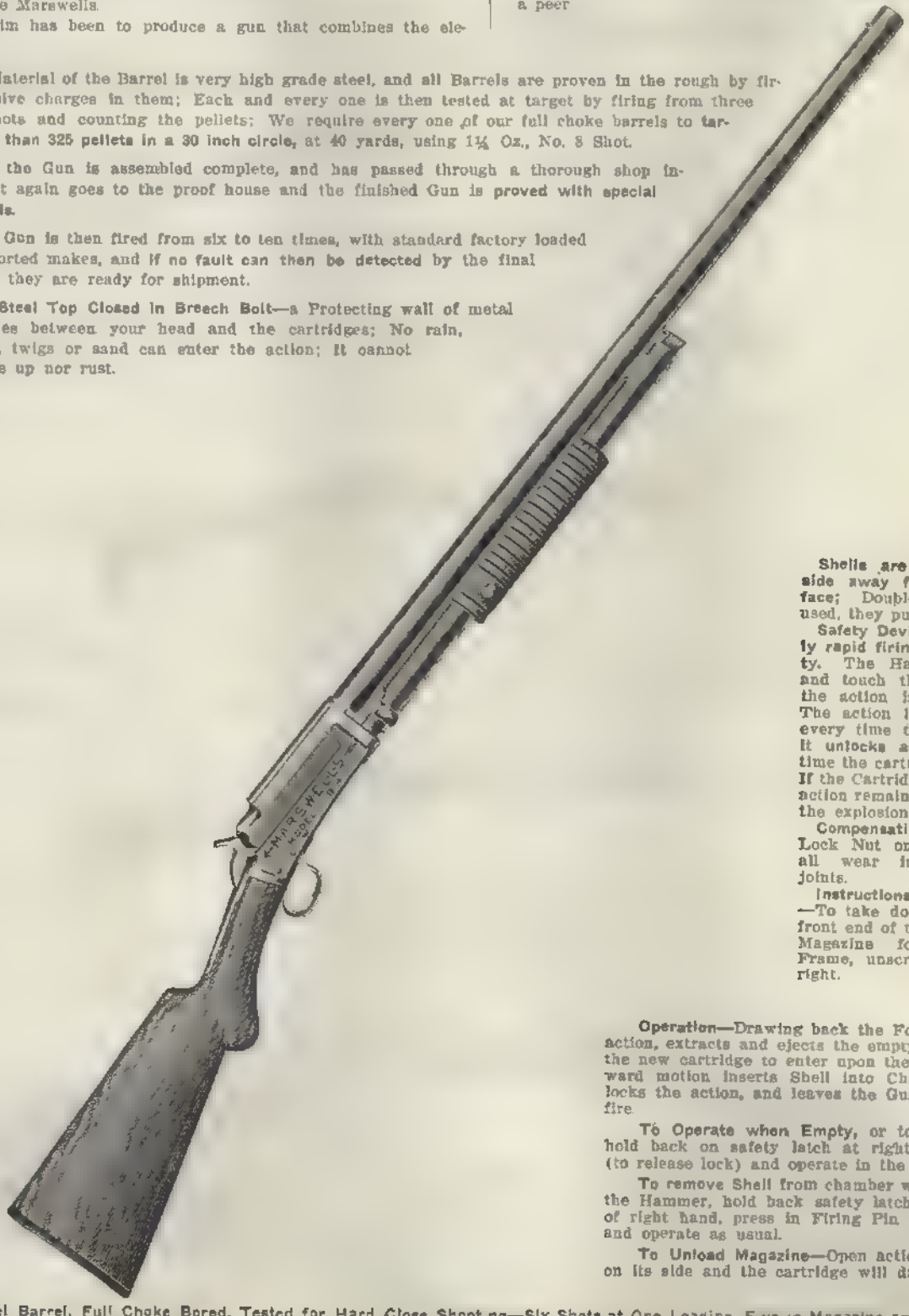
MARSWELLS REPEATING SHOT GUNS

These Guns are made especially for us in one of the best equipped and most up-to-date Gun Factories in the world.

Marswells Visible Hammer Guns are made on advanced lines, having every up-to-date feature of the other leading makes of repeating shot guns, with some special important features found only in the Marswells.

Our aim has been to produce a gun that combines the elegance of outline, perfection of balance, ease of taking apart and quality of finish of the best double guns, with the superiority in sighting and shooting of the single barrel.

We have certainly succeeded, and we claim, without fear of contradiction, that the Marswells Repeating Shot Gun is without a peer.



The Material of the Barrel is very high grade steel, and all Barrels are proven in the rough by firing excessive charges in them; Each and every one is then tested at target by firing from three to five shots and counting the pellets; We require every one of our full choke barrels to **target better than 325 pellets in a 30 inch circle**, at 40 yards, using 1¼ Oz., No. 8 Shot.

When the Gun is assembled complete, and has passed through a thorough shop inspection, it again goes to the proof house and the finished Gun is **proved with special heavy loads.**

Every Gun is then fired from six to ten times, with standard factory loaded shells, assorted makes, and if no fault can then be detected by the final inspection, they are ready for shipment.

Solid Steel Top Closed in Breech Bolt—a Protecting wall of metal at all times between your head and the cartridges; No rain, snow, dirt, twigs or sand can enter the action; It cannot clog, freeze up nor rust.

Shells are ejected from the side away from the shooter's face; Double Extractors are used, they pull every shell.

Safety Devices allow extremely rapid firing with entire safety. The Hammer cannot fall and touch the Cartridge until the action is securely locked. The action **locks automatically** every time the Gun is closed; **It unlocks automatically** every time the cartridge is discharged. If the Cartridge "hangs fire" the action remains locked until after the explosion.

Compensating Device — The Lock Nut on Barrel takes up all wear in the take-down joints.

Instructions for Taking Down—To take down, press latch at front end of the Magazine, draw Magazine forward clear of Frame, unscrew Barrel left to right.

Operation—Drawing back the Fore Arm opens the action, extracts and ejects the empty shell, and allows the new cartridge to enter upon the carrier. The forward motion inserts Shell into Chamber, closes and locks the action, and leaves the Gun cocked ready to fire.

To Operate when Empty, or to eject a mis-fire, hold back on safety latch at right of trigger guard (to release lock) and operate in the regular manner.

To remove Shell from chamber without firing, cock the Hammer, hold back safety latch with first finger of right hand, press in Firing Pin with right thumb, and operate as usual.

To Unload Magazine—Open action fully, turn Gun on its side and the cartridge will drop out.

Rolled Steel Barrel, Full Choke Bored, Tested for Hard Close Shooting—Six Shots at One Loading, Five in Magazine and One in Chamber

Fore Arm of new shape that fits the hand and feels better than the old style. Made of Black Walnut, scored for Quick Handling; Finely Finished. Rebit press. Inside with Steel Core, taking all strain off the wood. Stock is Straight Grained American Black Walnut, handsomely shaped and finished, 13½ in. Long with 2 in. Drop at Comb, and 2½ in. Drop at Heel. Hard Rubber Butt Plate.

	Each
No. 1914—12 Gauge; 30 in. Barrel; Weight 7½ Lbs. Each	$25.00
No. 1920—20 Gauge; 25 in. Barrel; Weight 6 Lbs. Each	26.00

MARLIN HAMMERLESS REPEATING SHOT GUNS

The Action of all Marlin Repeating Shot Guns is operated by the Sliding Fore Arm: One Backward and One Forward Movement will eject the empty shell, raise a loaded one from the Magazine into the Chamber, close and Lock the Breech, Cock the Hammer and make the Gun ready to fire again.

This Model has a **Special Cartridge Release**, which allows removing loaded shells from the Magazine without working through action; Also has **Automatic Recoil Safety Guard Lock**, which protects against "hang fire" Cartridges; Hammer and Trigger Safety is conveniently located in the Guard just in front of the Trigger, making a Double Lock on the Hammer, which can be instantly released for quick firing.

Cartridge Release Button and Matted Barrel on all Marlin Hammerless Shotguns

NEW MODEL No. 28 TAKE-DOWN, GRADE A

Shoots Smokeless, Semi-Smokeless or Black Powder

Matted Barrel, made of Special Rolled Steel of Extra Strong, Tough Quality with a tensile strength of over 66,000 Lbs to the square inch Breech Bolt, Firing Pin, and other important working parts are of Oil Treated, Chrome Nickel Steel with an elastic limit of over 100,000 Lbs. to the square inch—nearly two times as strong as similar parts in other Guns.

Black Walnut Forearm and Buttstock, Length of Stock 13½ in., 1½ in. Drop at Comb, 2½ in. Drop at Heel; Genuine Rubber Butt Plate.

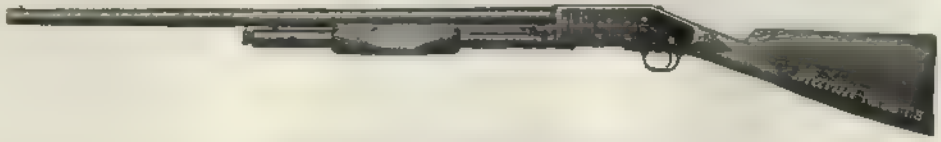
	Each
No. 28A—12 Gauge, 30 or 32 in. Barrel; Full Choke Bored; Six Shots; Weight About 7 Lbs. Each	$30.00

TRAP GRADE, TAKE DOWN

Especially Designed for Trap Shooting

The Buttstock and Forearm are Imported Circassian Walnut, London Oil Finish, Fine Hand Checking, Straight Grip Buttstock, 14 in. Long, 1⅝ in. Drop at Comb, 2 in. Drop at Heel; Hard Rubber Butt Plate.

No. 28T—12 Gauge; 30 in. Special Rolled Steel Barrel, Full Choke Bored, Raised Rib, Matted entire length on top; 6 Shots; Weight about 8 Lbs. Each	$55 00



TRAP SPECIAL GRADE, TAKE DOWN

A Moderate Priced Gun for the Average Trap Shooter

The Buttstock and Forearm are of Fine, Straight Grained American Black Walnut, nicely checked on the Grip and Forearm; Straight Grip Buttstock, 14 in. Long, 1⅝ in. Drop at Comb, 2 in. Drop at Heel; Hard Rubber Butt Plate.

	Each
No. 28TS—12 Gauge; 30 in. Special Rolled Steel Barrel, Full Choke Bored; Matted on Top the entire length; 6 Shots; Weight About 8 Lbs. Each	$35.00

GRADE A, 16 GAUGE, TAKE DOWN

A New Model, similar to the 12 Ga. Hammerless but neater and lighter and of perfect proportions throughout; it has the penetration and power of a 12 Ga. Gun

The Barrel is handsomely matted on top for its entire length, a great convenience in quick sighting; this feature costs extra on any other Standard Grade Pump Gun.

Solid Top Receiver, Side Ejection, Matted Barrel, Press Button Cartridge Release, Double Extractors, Trigger and Hammer Safety; Black Walnut Stock, 13½ in. Long, 1⅝ in. Drop at Comb, 3½ in. Drop at Heel; Genuine Rubber Butt Plate

	Each
No. 31A—16 Gauge; 28 in. Full Choke Barrel; 6 Shots; Weight About 6¾ Lbs. Each	$32.00
No. 31A2—20 Gauge, 5 Shots, 25 in. Full Choke Matted Barrel, made to use 2/2 or 2¾ in. Shells; Stock 13½ in Long; 1⅛ in Drop at Comb, 2⅛ in. Drop at Heel; Full Pistol Grip; Weight 5⅞ Lbs. Each	32 00

MARSWELLS WINDMILLS

OPEN WHEEL VANELESS

Showing the Mill with the fans open or as they appear when at work

Points of Excellence

Wheel—The Fans or the Wind Wheel are made of Clear Western Spruce which will defy the weather longer than any other material; the Wheel is made up of six sections.

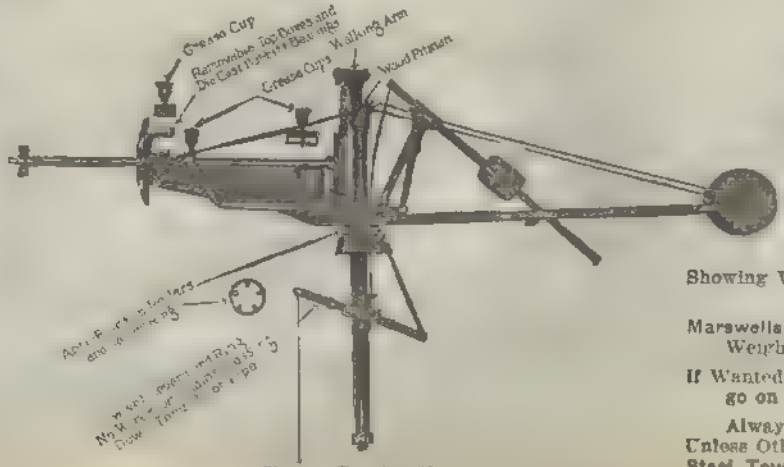
Direct Stroke—5, 6½ and 8 in. It is not back geared but the Wind Wheel makes one revolution for each stroke of the Pump. This Mill runs only one-third as fast as the steel back geared Mills—hence will last about three times as long.

Lubrication—All principal bearings or wearing parts are provided with removable top boxes, die cast babbitt Bearings and Grease Cups.

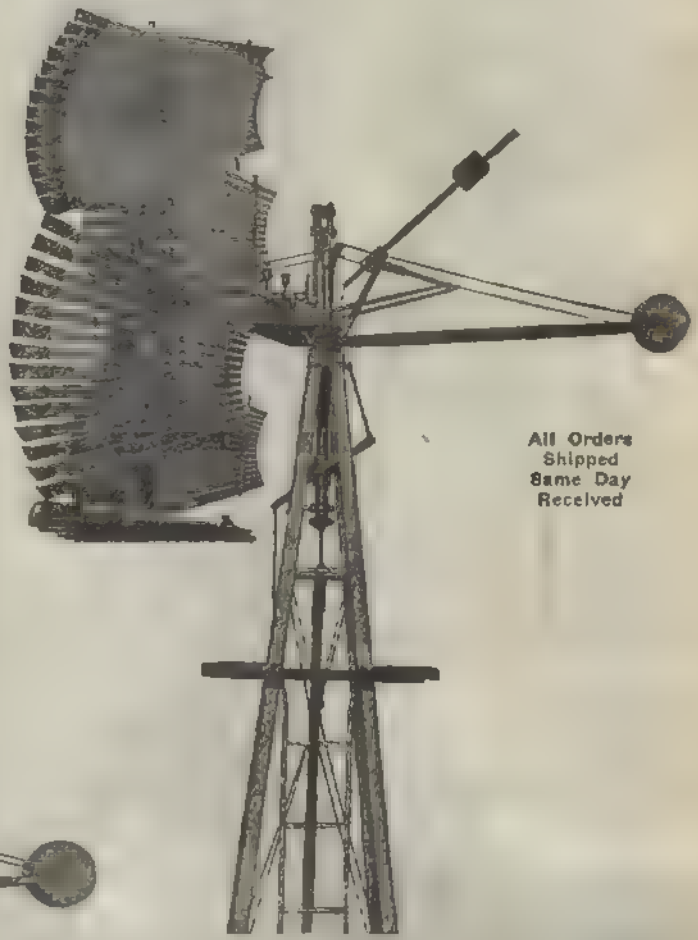
Pitman—The Pitman is made from hard maple bound with iron and soaked in oil.

Perfectly Self Regulating

The speed of revolution does not increase in a high wind and the Pump works steadily and without danger of breakage; In Winds up to a certain velocity the wheel is open or Mill is in gear and the maximum Wheel surface is displayed to the wind; When the wind increases to a velocity not desired or required for efficient pumping the Wheel closes just enough to reduce the wheel surface so that pumping will continue at the same uniform speed; A severe wind storm closes the wheel and practically stops its operation automatically; When the Wheel is folded or closed it not only relieves the Mill from strain but it also relieves the Tower from strain.



Shows Construction



All Orders Shipped Same Day Received

Showing Wind Wheel closed as it appears in a storm or when not at work

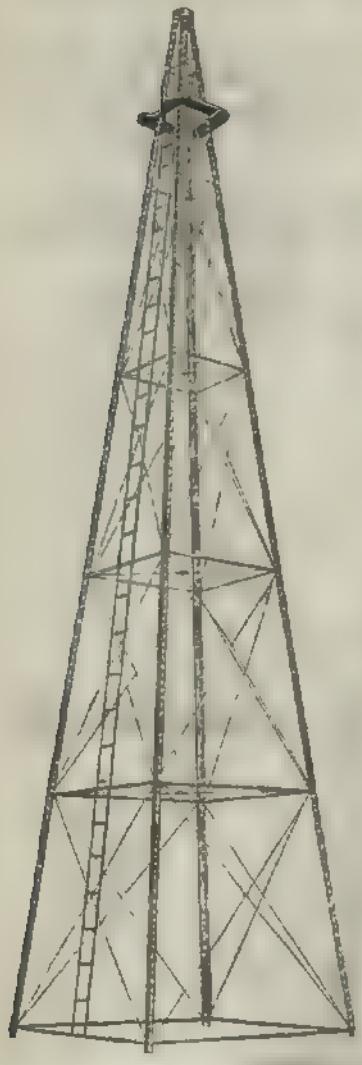
	Each
Marswells 10 ft. Open Wheel Vaneless Windmill, Direct Stroke; Weight 500 Lbs. Each	$56 50
If Wanted for Wood Tower, include one 5 ft. Steel Stub Tower to go on top of Wood Tower; Extra for same	9 50

Always state plainly in your orders how you want Mills fitted; Unless Otherwise Specified we ship all Mills fitted for 40 ft. Four Post Steel Towers.

For Marswells Steel Windmill Towers, See Page 1072

MARSWELLS STEEL WINDMILL TOWERS

Our Steel Towers are built in the very best possible manner, They are correctly proportioned and the effectual binding and bracing of the material gives them the greatest possible strength. More windmill disasters have been caused by the use of poorly constructed light weight towers and from towers not being properly anchored and erected than from any other cause.



All Orders Shipped Same Day Received

WHAT HEIGHT SHOULD THE TOWER OF A WINDMILL BE?

Rarely should the tower be less than forty feet except in the very flat prairie country where there are no high trees. To give good results the tower should be at least ten feet higher than the tallest obstruction.

A High Tower is Needed—

If there are buildings between the mill and the direct source of the wind

If the well is deep and the water must be drawn from far down.

If there are trees around the well

If there is a windbreak in the direct course of the prevailing winds

If the well is located in a hollow among hills.

No. 3—FOUR POST GALVANIZED STEEL TOWER

Braces and Girts every 10 feet; Corner Posts 2½x2½x¼ in.

This is our Standard Tower and we recommend it for all 8 ft. Mills and for 10 ft. Mills where the height does not exceed 40 feet.

Height	Weight	Each
10 feet	150 Lbs.	$15.00
20 feet	340 Lbs.	34.40
30 feet	500 Lbs.	50.00
40 feet	670 Lbs.	67 20
50 feet	865 Lbs.	85 60

No. 4—FOUR POST GALVANIZED STEEL TOWER

Braces every 10 feet but with Girts every 5 feet; Same size corner posts as our No. 3 Tower

This Tower is suitable for 12 ft. Mills and should also be used for 10 ft. Mills where the tower is higher than 40 feet or where an extra strong Tower is required.

Height	Weight	Each
10 feet	160 Lbs.	$ 16 60
20 feet	365 Lbs.	36 60
30 feet	550 Lbs.	55.08
40 feet	760 Lbs.	76.50
50 feet	1000 Lbs.	100 00
60 feet	1300 Lbs.	126 68
70 feet	1625 Lbs.	160 00

For Marswells Windmills, See Page 1071

MARTHA WASHINGTON WATCHES

The handsomest and most popular low priced Ladies' Watch ever made. Its dainty and clean cut appearance as well as its good time keeping qualities, will endear it to the heart of the Lady who desires a Low Priced Time Piece which she can depend on for accuracy and which at the same time has the appearance of a much higher priced watch. It is also makes an exceptionally fine Time Piece for Boys or Men who like a small, smooth Watch.

STEM WIND, STEM SET, FULL 6 SIZE

Perfectly Plain and Smooth; Snap Back and Bezel; Porcelain Dial; Plain Markings; Sunken Second Hand

The Movement in our Martha Washington Watch has highly polished Steel Cut Pinions, Improved Straight Line Escapement, Quick Train, Heavily Nickeled Plates, Handsomely Damaskeened all exposed Steel Fittings are highly polished and blued, has Barrel Bridge and a Specially Tempered Main Spring of Highest Quality. The Barrel Bridge allows a broken Main Spring to be removed and replaced by a new one without disturbing the Adjustment or Regulation as it is unnecessary to remove the Works from the Case. The Regulation is so constructed that the Hair Spring cannot catch on it nor become displaced. Every Martha Washington Watch is carefully Tested and Adjusted at the Factory.

	Each
No. 136—Nickel Plated Finish	$2 50
No. 138—Gun Metal Finish	2 50
No. 140—Gilt Finish	2 50

One in a Box

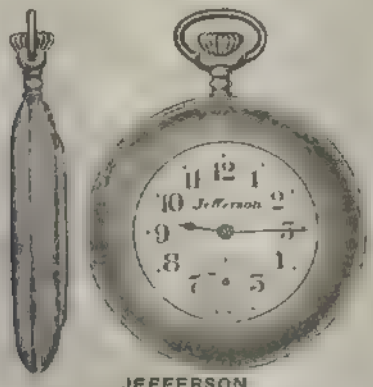
GUARANTEE
We Guarantee the MarthaWashington for one Year
CORRECT TIME CO.
DULUTH
PORTLAND-SPOKANE

READ OUR GUARANTEE and Note the RESTRICTED SALE PRICE at Retails Everywhere in the United States for $2.50 Each

THIS WATCH MUST NOT BE SOLD FOR LESS THAN THE RESTRICTED PRICE. $2.50

MARTHA WASHINGTON WATCH ASSORTMENTS

	Per Assortment
No. 141—Twelve Watches. Assorted as Follows..	$30 00
6 Only No. 136—Nickel Plated Finish	
3 Only No. 138—Gun Metal Finish	
3 Only No. 130—Gilt Finish	



JEFFERSON AND MADISON WATCHES

Guaranteed for Two Years

Three-Quarter Size Illustration

JEFFERSON

Twelve Size "knife edge" thin Case; small flat Crown; French model antique Bow; Stem wind and pull out Pendant Set, same as high grade watches; 6 Size, quick Train improved straight line Escapement; Adjusted to the same positions as a full Jewel Watch.

	Each
No. 160—Composition Silver Nickel Case; Wears as well as Silver; the Metal is very hard, takes a high polish and can be engraved the same as gold or silver	$3.00
No. 162—Gun Metal Case, with Gilt Rim; a Black Nickel Plate Finish over Composition Metal which Wears Satisfactorily	3.00
No. 164—Composition Gilt Case; a very close imitation of Gold, same color throughout; Under certain conditions this Metal will tarnish but polishing restores the original gold color	3.00

One in a Box

MADISON WRIST WATCH

Especially adapted for the outdoor Man or Woman and is a valuable equipment for Policemen, Motor Car Drivers, Street Car Conductors and the Army and Navy.

Stem Wind, Pendant Set with short rounded Crown; The Watch is made in Solid Silver Nickel and Gun Metal Finish Cases and comes with Strong Leather Straps in assorted colors.

	Each
No. 150—Solid Nickel Silver Case, with Leather Wrist Strap	$3.00
No. 152—Gun Metal Finish Case, with Leather Wrist Strap	3.00

One in a Box

GEORGE WASHINGTON WATCHES

Our Martha Washington Ladies' Watch has proved so popular that we have put out the same style and construction in a Gentlemen's Size and named it the Geo. Washington; this is a Thin Model 14 Size Time Piece of fine proportions. The Mechanism is as strong as in a much larger Watch; The Escapement is so substantially made that it can be cleaned many times without any readjustment. The Bridges are firmly planted, allowing no side play and can be depended on to hold wheel distances undisturbed.

Front

Thin Model

Back

STEM WIND, STEM SET, FULL 14 SIZE

Beautifully Engraved, Snap Back and Bezel; Porcelain Dial, Plain Markings; Sunken Second Hand, Antique Pendant, Bow and Crown; Heavy Beveled Crystal

The Movement in our George Washington Watch has highly polished Steel Cut Pinions, Improved Straight Line Escapement, Quick Train, Heavily Nickeled Plates. Handsomely Damaskeened; all exposed Steel Fittings are highly polished and blued, has Barrel Bridge and a Specially Tempered Main Spring of Highest Qaulity; the Barrel Bridge allows a broken Main Spring to be removed and replaced by a new one without disturbing the Adjustment or Regulation as it is unnecessary to remove the Works from the Case; the Regulation is so constructed that the Hair Spring cannot catch on it nor become displaced; Every George Washington Watch is carefully Tested and Adjusted at the Factory.

	Each
No. 142—Nickel Plated Finish	$2.50
No. 144—Gun Metal Finish	2.50
No. 146—Gilt Metal	2.50

One in a Box

THIS WATCH MUST NOT BE SOLD FOR LESS THAN THE RESTRICTED PRICE. $2.50

READ OUR GUARANTEE and Note the RESTRICTED SALE PRICE It Retails Everywhere in the United States for $2.50 Each

GUARANTEE We Guarantee the George Washington for one Year CORRECT TIME CO., DULUTH PORTLAND-SPOKANE

GEORGE WASHINGTON WATCH ASSORTMENTS

	Per Assortment
No. 148—Twelve Watches, Assorted as Follows	$30.00

6 Only No. 142—Nickel Plated Finish
3 Only No. 144—Gun Metal Finish
3 Only No. 146—Gilt Finish

MULE SKINNERS

Double Latigo Cover; Shot Loaded; Buck Stitched

No. 5030L—7 ft. Long, 8 Plait Buckskin Point 3¼ ft. Long, Large Head Button; Color ranges from Russet to Chocolate — Per Dozen $32.00

No. 5030C—6½ ft. Long, 8 Plait Buckskin Point, 3¼ ft. Long; Large Head Button; Pear Chrome Leather Cover — Per Dozen $32.00

Weight 24 Lbs. per Dozen

No. 5022—6½ ft. Long; New Colorado Style, 6 Plait Braided Buck Point, 1½ ft. Long, Copper Wire Wound Butt — Per Dozen $23.00

Weight 18 Lbs. per Dozen

CATTLE WHIPS

AUSTRALIAN, CALIFORNIA STYLE

8 Plait Latigo Leather, Shot Loaded, Double Loop Fastener, Solid Steel Revolving Handle, Leather Covered; Buck Point, Three Leather Buttons

No. 810—10 ft. Long; Weight 22½ Lbs. per Dozen — Per Dozen $38.00

No. 812—12 ft. Long; Weight 25 Lbs. per Dozen — Per Dozen $44.00

All Above, Open Stock

DROVERS' WHIPS

Jacksonville, California Style; a Favorite in the North Central and Western States, and Western Canada

NEW ROTARY, SHOT LOADED

With 9 in. Double White Lacing at the Handle; Otherwise same as above

No. 0740—10 ft. Long; Weight 23 Lbs. per Dozen — Per Dozen $34.00

No. 0742—12 ft. Long; Weight 25½ Lbs. per Dozen — Per Dozen $38.00

SWIVEL, CALIFORNIA STYLE

No. 5084—10 ft. Long; 8 Plait Russet Leather, Oiled; White Horsehide Point; Swivel Wood Handle — Per Dozen $26.50

Weight 15 Lbs. per Dozen

All Above, Open Stock

WHIP STOCKS

RAWHIDE

Solid Rawhide, Plaited Through, Black; Five 1½ in. Nickel Ferrules; 1½ in. Nickel Head; Buckskin Keeper

Per Dozen

No. 707X—4½ ft. Long; Weight 8 Lbs. per Dozen.....$12.00

Quarter Dozen in a Bundle

No. 834—MALACCA

Rich Dark Color; 1¾ in. Nickel Head; One 1½ in. Nickel Ferrule; Buckskin Keeper

Per Dozen

4½ ft. Long; Weight 6 Lbs. per Dozen.....$5.50
5 ft. Long; Weight 7 Lbs. per Dozen..... 8.40

Open Stock

EXTRA QUALITY HICKORY HAND SHAVED

Four 1½ in. Nickel Ferrules; Buckskin Keeper

Per Dozen

No. X966—4½ ft. Long; Weight 6 Lbs. per Dozen.....$7.50

Per Dozen

No. 966—5 ft. Long; Weight 6½ Lbs. per Dozen.....$8.20

Open Stock

WHITE HICKORY; HAND SHAVED

No. X965—With Rawhide Keeper

Length, Feet	4	4½	5
Weight Doz., Lbs.	4	4½	5
Per Dozen	$4.00	4.30	4.80

EXTRA QUALITY, WHITE HICKORY, HAND SHAVED

No. 965—With Buckskin Keeper

Length, Feet	4½	5
Weight Doz., Lbs	4½	5
Per Dozen	$6.00	6.70

No. 991—WHITE HICKORY

Turned, with Rawhide Keeper

Length, Feet	4	4½	5
Weight Doz., Lbs.	4	4½	5
Per Dozen	$2.20	2.40	2.70

Open Stock

WHIP LASHES

CALIFORNIA STYLE, HIGH GRADE, WESTERN STAGE LASHES

Braided Buckskin

Length, Feet	6	10	12	14	16	18	20	24
No. 1035—4 Plait	$7.20	16.00	20.00	24.00	28.00	.....	.....	.....
No. 1036—8 Plait	4.50	20.00	24.00	29.00	32.00	42.00	50.00	54.00
No. 1037—8 Plait	....	25.00	30.00	35.00	40.00	.....	.....	.....
No. 1038—12 Plait	....	44.00	52.00	.....	71.00	.....	.....	.....
No. 1039—16 Plait	....	53.00	62.00	.....	80.00	.....	.....	.....

HORSEHIDE, WITH BUCKSKIN TIP

Length, Feet	10	12	14
Weight Dozen, Lbs.	3½	5	5
No. 1022—6 Plait, Per Dozen	$12.00	15.00	17.00

No. 984—LINEN LASHES

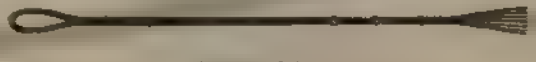
Length, Feet	6	10	12
Per Dozen	$2.20	4.50	5.50

BRAIDED HORSEHIDE

Length, Feet	6	10	12	14	16	18	20
No. 1024—4 Plait	$3.00	8.00	9.50	....	13.00	....	....
No. 1025—6 Plait	....	10.50	12.00	15.00	16.80	21.00	24.00

All Lashes, Open Stock

WHIP SNAPS OR CRACKERS



Length, 7 Inches

Per Dozen

No. 7S—Silk $0.66

Per Dozen

No. 7H—Half Silk $0.50

Per Dozen

No. 7C—Cotton $0.20

Open Stock

NORTHWESTERN TEN BRICK MACHINES

For Making Cement Bricks, can be made at a cost to compete with Common Bricks and allow a good Margin of Profit; Fancy or Special Faced Brick can also be made to Compete with Pressed Brick.

Shows Bricks on Pallet ready to be placed on Curing Rack

Shows Machine ready for Material

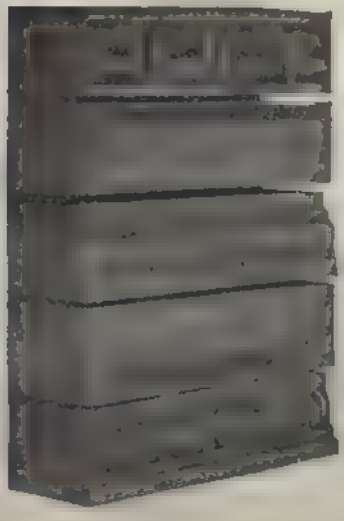
Shows Division Plates drawn back; Bricks ready to be turned over on Pallet

Shows Process of Tamping

This Machine makes Bricks either Face up or Face Down; an Ordinary Pallet is used in making the Brick Face Up; a Special Machined Plate is used in making Brick Face Down, in connection with either a Special Face Plate or with the Machine Plate.

Turning over the Finished Bricks

The Northwestern Makes 10 Bricks at One Time the Tamping Process is done with an easily operated Gang Tamper, which is equipped with a Wedge Shaped Tamping Bar that forces the Material to Sides and Ends uniformly, it is made of best grade Gray Iron Castings and Steel the Mould Box consists of Front and Back Plate with Polished Steel Division Plates, which are securely fastened by means of Groove and Key in the Back Plate; the Gang Tamper has two Coil Springs at the back, with a threaded Eye Bolt for adjusting the tension



Shows Ornamental Faces which can be furnished with this Machine

The Capacity of the Machine depends on convenience of handling. It is designed to have a capacity of from 6,000 to 10,000 bricks per day, with the ordinary crew of men; the maximum capacity is based on making of common brick, eliminating the one operation of turning brick over as illustrated in Figures 1, 2 and 4. A mixture of one part of cement to four parts of sand makes a very good mixture for special faced brick and one part of cement to five parts of sand, makes a very good mixture for common brick.

The Ornamental Faces illustrated at the left are dropped into the Pockets for each Brick and the Material is tamped directly on the Face.

	Each
No. 254TB—Ten Brick Machine, Without Tamper; Weight 425 Lbs. Each	$ 90 00
No. 255TB—Ten Brick Machine, With Tamper	135 00
No. 255OF—Ornamental Face Plates; Weight 3 Lbs.	.60
No. 253OE—Ornamental End Plates; Weight 1½ Lbs.	.48

OILERS

Mowing Machine; Improved Wide Mouth Pattern

PLAIN TIN

Wide Mouth Opening; Capacity One Pint; Diameter 3 in., Height 3½ in., Length of Spout 4 in.

	Per Dozen
No. 01—With Straight Spouts	$1.80
No. 02—With Bent Spouts	1.80

One Doz. in a Box; Weight 2 Lbs. per Doz

EXTRA SPOUTS

	Per Dozen
No. 01S—Straight Spouts	$0.50
No. 02S—Bent Spouts	.50

Open Stock

COPPERIZED STEEL

Dome Top

Made of Seamless Steel, Wide Mouth Opening; Capacity One Pint; Diameter 3 in.; Height 3½ in., Spout 5 in. Long.

	Per Dozen
No. 05—With Straight Spouts	$4.50
No. 06—With Bent Spouts	4.50

One Doz. in a Box; Weight 4 Lbs. per Doz.

EXTRA SPOUTS

	Per Dozen
No. 05S—Straight Spouts	$1.00
No. 06S—Bent Spouts	1.00

COPPER PLATED STEEL

Dome Top

Extra Heavy Embossed, Seamless Steel; Wide Mouth Opening; Copper Plated Inside and Out; Cut Thread Brass Screw; Double Swaged Spring Bottom; Diam. 3 in.; Height 4 in.; Capacity, One Pint; Spout 5 in. Long.

	Per Dozen
No. 07—With Straight Spouts	$5.00
No. 08—With Bent Spouts	6.00

One Doz. in a Box; Weight 5 Lbs. per Doz.

EXTRA SPOUTS

	Per Dozen
No. 07S—Straight Spouts	$2.00
No. 08S—Bent Spouts	2.00

ENGINEER'S DRIP

Made of Sheet Steel, Strong Soldered; Detachable Screw Spout; Large Opening of Heavy Oils; a Vent Controls the Flow

One Pint, 3 in. Diameter

	Per Dozen
No. 09—7 in. Straight Spout	$7.50
No. 01—10 in. Straight Spout	8.00

Weight 4 Lbs. per Dozen

One Quart, 3¾ in. Diameter

	Per Dozen
No. 011—7 in. Bent Spout	$9.00
No. 012—10 in. Bent Spout	9.50
No. 013—7 in. Straight Spout	9.00
No. 014—10 in. Straight Spout	9.50

Weight 6 Lbs. per Dozen

EXTRA SPOUTS

Length, In.	7	10
No. 015S—Straight, per Dozen	$1.80	2.00
No. 016S—Bent, per Dozen	1.80	2.00

HOUSEHOLD

The Breast is Spun from One Piece of Zinc; Spring Tin Bottom is securely Double Seamed to Breast Threaded Spout; the 00 Size is especially intended for Sewing Machines.

Nos.	00	0	1	2
Capacity Gills	¼	½	¾	1¼
Diameter, In.	2¼	2½	2¾	3⅜
Spout, In.	2¾	2¾	3	4¼
Weight Doz., Lbs	¾	1	1¼	2
Per Dozen	$1.00	1.25	1.50	2.00
Nos.	3	4	5	6
Capacity Gills	2	3	4	4¾
Diameter, In.	3⅞	4⅛	4⅜	4½
Spout, In.	4¼	5	5	5
Weight, Doz., Lbs	3	3½	3½	4
Per Dozen	$2.25	2.75	3.50	4.50

Sizes 00 to 1, One Doz.; 2 to 6, Half Doz. in a Box

EXTRA ZINC SPOUTS

Size Nos.	0S	1S	2S	3S	4S	5S
Length, In.	2¾	2¼	4¼	4¼	5	5
Per Dozen	$0.70	.80	.90	.95	1.00	1.10

CLAW TOOLS

EXTRA HEAVY
For Pulling Tacks

	Each
No. 123—Osborne; Length 6¾ in., Best Quality Crucible Cast Steel, Polished; Rosewood Handle, Riveted Iron Shank; Brass Ferrule	$3 00

Weight 3¼ Lbs. per Dozen

OCTAGON
For Pulling Tacks

	Each
No. 124—Osborne, Length 6½ in.; Crucible Cast Steel, Polished, Rosewood Handle, Riveted, Octagon Shank, Brass Ferrule	$0 80

Weight 2½ Lbs. per Dozen

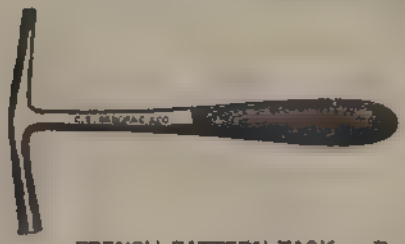
Half Dozen in a Box

ROUND
Length 6½ in., Polished Steel; Round Shank; Brass Ferrule

	Each
No. 122—Osborne; First Quality, Rosewood Handle	$0 60
No. 0122—Osborne, Second Quality, Black Handle	40

Half Dozen in a Box
Weight 2½ Lbs. per Dozen

SADDLERS' HAMMERS



FRENCH PATTERN TACK Each

No. 55—Osborne, Polished Steel Head, Length 6¾ in., Oval Rosewood Handle, Length 10 in., Strongly Riveted $3 00

Weight 1¼ Lbs. Each

COMMON TACK Each

No. 56—Osborne, Polished Steel Head, Length 6 in., First Quality, White Hickory Handle, Length 10½ in. $1 50

Weight ¾ Lb. Each

Half Dozen in a Box

SADDLERS' RULES

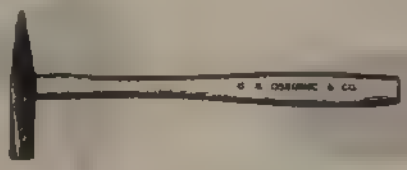
Best Quality Maple, Shellac Finish, 1¼ in. Wide

	No. 161 Brass Bound		No. 162 Beat		No. 163 Common	
Length, Feet	2	3	2	3	2	3
Wt. per Doz.	4¼	4¾	3½	4	3	3½
Each	$2.50	4.00	.80	1.00	.70	.90

Open Stock

No. 54—SHOE
Polished Steel Head; First Quality White Hickory Handle

Size Nos.	0	1	2	3	4	5
Diam. of Head, In.	1⅜	1⅛	1⅛	1⅛	1¼	1⅜
Weight Each, Lbs.	⅞	1	1⅛	1¼	1⅜	1½
Each	$0.64	.70	.80	.90	1.00	1.10



No. 57—RIVETING
Polished Steel Head; First Quality White Hickory Handle

Size Nos.	1	2	3
Diam. of Head, In.	1½	1⅜	1¼
Weight Each, Lbs.	⅛	⅞	¾
Each	$0.80	.90	1.00

Half Dozen in a Box

BOUNCERS

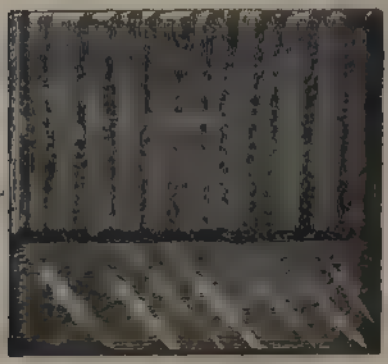
For Smoothing Down Foldwork Each

No. 10—Dogwood, Length 5 in., Diam. 2⅜ in. $0 50

Open Stock; Weight 2½ Lbs. per Dozen

SLICKERS

For Slicking or Smoothing Down the Work



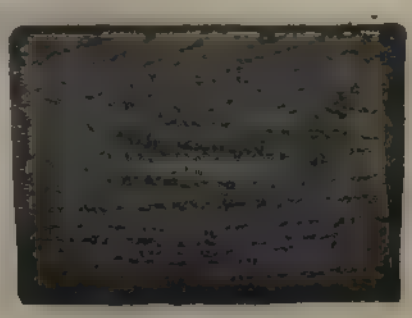
Glass; Size 5x4½ in. Each

No. 167—With Handle $1.20

Weight 6 Lbs. per Dozen

No. 167½—Without Handle .50

Weight 4 Lbs. per Dozen



Size 5¼x4 in. Each

No. 168L—Lignum-Vitae $0 80

Weight 4 Lbs. per Dozen

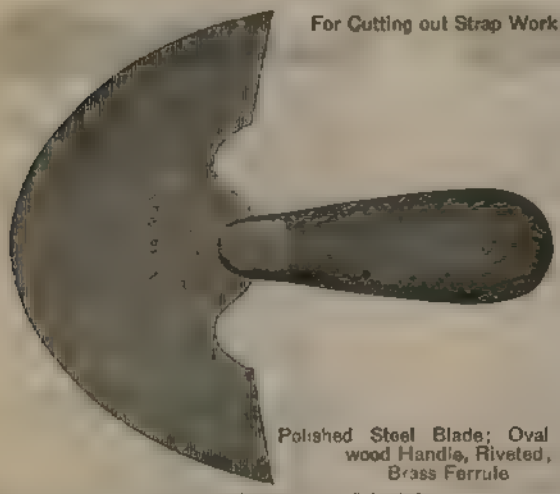
No. 168S—Steel 1 20

Weight 7 Lbs. per Dozen

Half Dozen in a Box

ROUND KNIVES AND HEAD KNIVES

For Cutting out Strap Work, Fitting, Trimming and General Bench Work



Polished Steel Blade; Oval Rosewood Handle, Riveted, Brass Ferrule

No. 70—OSBORNE, ROUND

Width of Blade, In	5	6	6½	7
Weight per Dozen Lbs	3¼	4⅓	5	6¼
Each	$2.00	2.40	2.80	3.80

No. 709 GOMPH, ROUND

Width of Blade, In	4	4½	6	5½	6	6½
Weight per Dozen, Lbs.	2¾	3	3½	4	4½	4¾
Each	$2.62	2.62	3.16	3.16	3.68	4.21

Half Doz. in Box.

OSBORNE, PHILADELPHIA PATTERN, HEAD

	Each
No. 75—Width of Blade 4⅝ in., Polished Steel, Oval Rosewood Handle, Brass Ferrule	$1 30

Weight 2½ Lbs. per Dozen

GOMPH, FRENCH PATTERN, HEAD

This Pattern can also be used as a Round Knife

	Each
No. 175—Width of Blade 4½ in., Polished Steel, Oval Rosewood Handle, Brass Ferrule	$2.60

Weight 2½ Lbs. per Dozen

SMALL HEAD, ONE POINT

For Cutting out Curved Work; this Style is also largely used by Art Glass Workers

Width of Blade 2¼ in.; Polished Steel; Oval Rosewood Handle, Brass Ferrule

	Each
No. 73 —Osborne	$1.00
No. 73G Gomph	2 00

Half Dozen in a Box; Weight 1⅓ Lbs. per Dozen

Half Dozen in a Box

CAP KNIVES

For Cutting Thread, Paring and Trimming Edges, etc.

POINTED END

This Style is the most popular

Round Handle

Polished Steel Blade; Rosewood Handle; Brass Ferrule

	Each
No. 79 —Osborne; 3½ in.	$0 40
No. 793G—Gomph; 3½ in. Blade	.60
No. 795G—Gomph; 5 in. Blade	1.00

Flat Handle

Polished Steel Blade; Rosewood Handle, Riveted

	Each
No. 80—Osborne; 3½ in. Blade	$0 70
No. 83 —Gomph; 3½ in. Blade	.70
No. 85 Gomph; 5 in. Blade	1.00

Osborne One Dozen, Gomph Half Dozen in a Box, Average Weight 1½ Lbs. per Dozen

SQUARE POINT

Round Handle

Polished Steel Blade, Rosewood Handle, Brass Ferrule

	Each
No. 763 —Osborne, 3½ in. Blade	$0 40
No. 765 —Osborne, 5 in. Blade	60
No. 763G—Gomph, 3½ in. Blade	60
No. 765G—Gomph; 5 in. Blade	1 00

Flat Handle

Polished Steel Blade; Rosewood Handle, Riveted

	Each
No. 77 —Osborne; 3½ in. Blade	$0.70
o. 773G Gomph; 3½ in. Blade	.70
No. 775G Gomph; 5 in. Blade	1.00

Osborne One Dozen, Gomph Half Dozen in a Box; Average Weight 1½ Lbs. per Dozen

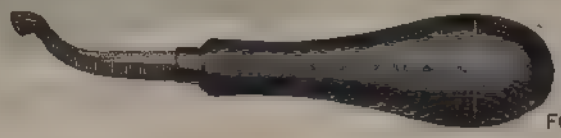
CREASERS

For making the Creased Border and Smoothing the Edge of Strap Work

Cuts Showing Sizes of Single Creases

FOR SINGLE CREASE; IRON ENDS

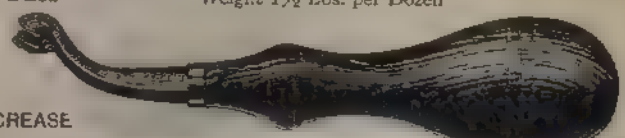
No. 23—Osborne; Length 8 in., Polished, Malleable Iron Ends, Rosewood Handle, Brass Ferrules, to Crease 4 Sizes, Nos. 1, 2, 3, 4 ..... Each $1.30
Half Dozen in a Box; Weight 4½ Lbs. per Dozen



FOR SINGLE CREASE

No. 22—Osborne; Length 6 in.; Polished Steel; Rosewood Handle; Octagon Shank; Brass Ferrule; Assorted Sizes, Nos. 1, 2, 3, 4, 5.. Each $1 00
Weight 2 Lbs. per Dozen — Half Dozen in a Box

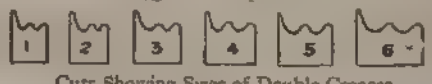
No. 22G—Gomph; Length 6 in., Polished Steel, Rosewood Handle, Octagon Shank, Brass Ferrule, Assorted Sizes, Nos. 1, 2, 3, 4, 5, 6, Each $1 00
Weight 1½ Lbs. per Dozen



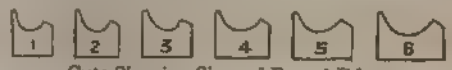
FOR DOUBLE CREASE

No. 22½—Osborne; Length 6 in., Polished Steel, Rosewood Handle, Octagon Shank; Brass Ferrule; Assorted Sizes, Nos. 1, 2, 3, 4, 5, 6 ..... Each $1 00
Weight 2 Lbs. per Dozen — Half Dozen in a Box

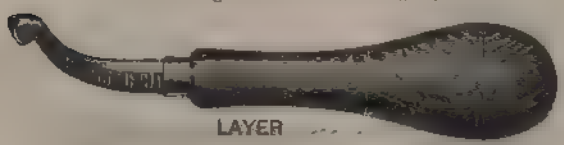
No. 22½G—Gomph; Length 6 in., Polished Steel, Rosewood Handle; Octagon Shank; Brass Ferrule; Assorted Sizes, Nos. 0, 1, 2, 3, 4, 5 ..... Each $1 00
Weight 1¾ Lbs. per Dozen



Cuts Showing Sizes of Double Creases



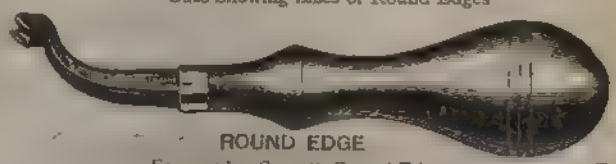
Cuts Showing Sizes of Round Edges



LAYER

For Rounding Edge and Creasing

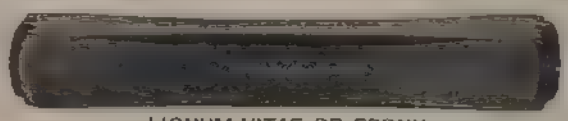
No. 24½—Osborne; Length 6 in., Polished Steel; Rosewood Handle; Octagon Shank; Brass Ferrule; Assorted Sizes, Nos. 1, 2, 3, 4, 5. Each $1 00
Weight 5 Lbs. per Dozen — Half Dozen in a Box



ROUND EDGE

For making Smooth Round Edge

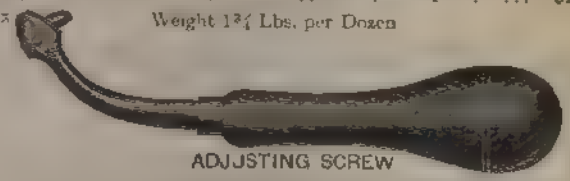
No. 24½G—Gomph; Length 6 in., Polished Steel, Rosewood Handle, Octagon Shank, Brass Ferrule, Assorted Sizes, Nos. 1, 2, 3, 4, 5, 6 ..... Each $1 00
Weight 1¾ Lbs. per Dozen



LIGNUM-VITAE OR EBONY

Osborne; 5½ in. Long; Polished

No. 20S—Single Crease on Each End ..... Each $0.40
No. 20D—Double Crease on Each End ..... .50
No. 20N—Uncut, Allowing any Crease to be cut ..... .32
No. 20C—For Rounds, Concaved at Both Ends ..... .50
Weight 2 Lbs. per Dozen — Half Dozen in a Box



ADJUSTING SCREW

For Fancy Creasing on Loops, etc., Adjustable to Different Widths

No. 18—Osborne; Length 6 in., Polished Steel Rosewood Handle; Brass Ferrule. ..... Each $0.90
Weight 2 Lbs. per Dozen

CHANNELERS

For Cutting Channels in Traces and other Strap Work to allow Stitching to be covered

EDGE

For Making Rounds, etc

No. 208—Osborne; Length 6 in., Brass Shank and Head, Rosewood Handle; Brass Ferrule; Polished Steel Blade..... Each $2.80
Weight 2¼ Lbs. per Dozen — Half Dozen in a Box

No. 208G—Gomph; Length 6 in., Brass Shank and Head, Rosewood Handle; Brass Ferrule; Polished Steel Blade..... Each $3 00
Weight 2¼ Lbs. per Dozen

STRAIGHT

For All Straight Work

No. 31—Osborne; Length 6¾ in.; Malleable Iron; Polished Steel Blade; Rosewood Handle; Brass Ferrule..... Each $1 80
Weight 3 Lbs. per Dozen — Half Dozen in a Box

No. 31G—Gomph; Length 6¾ in., Malleable Iron, Polished Steel Blade, Rosewood Handle, Brass Ferrule ..... Each $2 00
Weight 3 Lbs. per Dozen

CARRIAGES AND WHEELS

In Ordering, specify desired number of Stitches per inch, Teeth are Spaced 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 or 16 per inch

CARRIAGES WITH PRICKING WHEEL

For Marking Distances for Stitches

	Each
No. 39—Gomph; Length 6¼ in., Polished Steel; Rosewood Handle, Brass Ferrule	$1.50

Weight 1 Lb. per Dozen

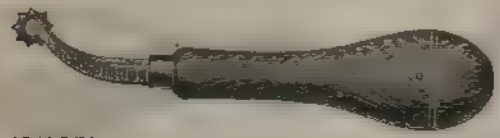
CARRIAGES WITH AND WITHOUT WHEEL

For Running over the Stitches to give them a Finished Appearance; Length 6¼ in.

	Each
No. 40G—Gomph; Solid Handle with Wheel	$1 60
No. 400—Gomph, Box Handle without Wheel but with Reservoir for Different Wheels	2.00

Weight 1½ Lbs. per Dozen

Half Dozen in a Box



CARRIAGES WITH STATIONARY FINISHING WHEEL

Used same as an Overstitch Wheel to give a Finished Appearance to the Work; Length 6 in., Polished Steel, Rosewood Handle, Brass Ferrule

	Each
No. 40—Osborne; Octagon Carriage	$1.50
No. 40T—Osborne, Thin Carriage	1 50

Weight 1 Lb. per Dozen

OVERSTITCH OR FINISHING WHEELS

For Box Carriage

Sizes indicate Number of Stitches per inch

	Each
No. 400X—Gomph; Sizes 4 to 16	$0 64

Weight ¼ Lb. per Dozen

Half Dozen in a Box

PATENT LEATHER COMPASSES

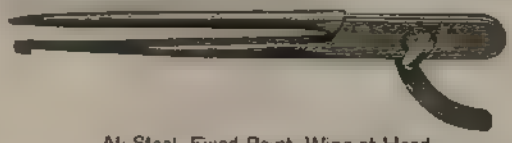
For Channeling or Grooving Leather so that the stitches will come below the surface, Plain Point running along Edge acts as Parallel Guide for Channeler

With Assorted Points

	Each
No. 30½—Length 6 in.; Malleable Iron Polished, 4 Steel Points	$3 00
Weight 2¼ Lbs. per Dozen	
Extra Points for Above Compass	.20
Scratchers for Extra Points	.20

Half Dozen in a Box

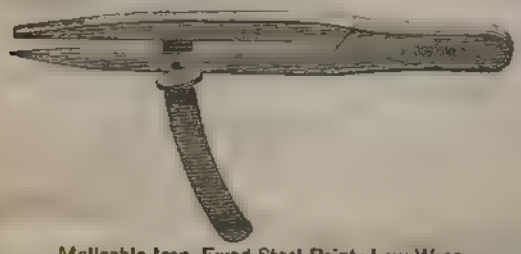
Osborne



All Steel, Fixed Point, Wing at Head

	Each
No. 29—Length 5½ in., Polished Steel	$1 50

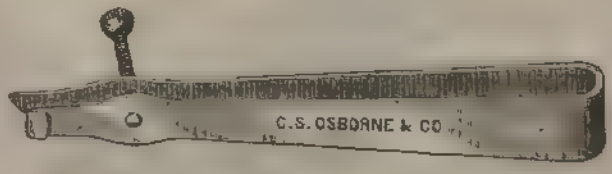
Weight 3 Lbs. per Dozen



Malleable Iron, Fixed Steel Point; Low Wing

	Each
No. 30—Length 5¾ in., Malleable Iron, Polished; Steel Point	$1.50

Weight 2½ Lbs. per Dozen



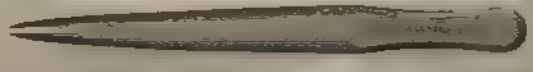
Spring

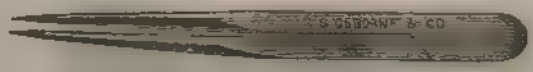
	Each
No. 29½—Length 4¾ in., Polished Steel; Adjusted by Set Screw	$1.00

Weight 1 Lb. per Dozen

Half Dozen in a Box

SADDLERS' COMPASSES OR DIVIDERS





Used for Spacing Distances, Creasing, etc.

No. 26—SADDLERS' Polished Steel

Length, In.	5	6	7	8
Weight per Dozen, Lbs.	3	3¾	3½	4
Each	$1.00	1.00	1.20	1.20

No. 28—COMMON Malleable Iron, Polished

Length, In.	5	6
Weight per Dozen, Lbs.	1⅝	2⅛
Each	$0.40	.44

One Dozen in a Box

For Mechanics' Calipers, Dividers and Compasses, see Tool Dept. Page

DRAW GAUGES

For Cutting Straps in Accurate Widths from Side Leather

LATTA'S PATENT, Handle Binds Slide

Each

No. 52—Length over all 5½ in., Iron Frame, Rosewood Handle, Polished Steel Slide ⅜ in. Wide, Graduated 1⅛ in. to 4 in., Length over all 5½ in., Crucible Cast Steel Blade, 3 in. Long, ¾ in. Wide; Screw Handle allows quick adjustment..... $3.50

IMPROVED, BRASS FRAME

Each

No. 51 Osborne; Length over all 5¾ in., Polished Brass Frame, Inlaid Rosewood Handle, Polished Steel Slide, ¾ in. Wide, Graduated ⅛ in. up to 4 in. Length over all 5¾ in., Crucible Steel Blade, 3 in. Long, ¾ in. Wide..... $3.50

Half Dozen in a Box; Weight 11¼ Lbs. per Dozen

IMPROVED

Each

No. 52½—Osborne; Length over all 5¾ in., Polished Iron Frame, Riveted Rosewood Handle; Polished Steel Slide ¾ in. Wide, Graduated ⅛ in. up to 4 in., Length over all 5¾ in., Crucible Cast Steel Blade, 3 in. Long, ¾ in. Wide..... $2 50

Weight 9¾ Lbs. per Dozen

HOLLOW HANDLE

Each

No. 51½—Osborne; Length over all 5¾ in., Iron Handle, Natural Finish Butt, Polished Head, Polished Steel Slide ¾ in. Wide, Graduated ⅛ in. up to 4 in., Length over all 5¾ in.; Crucible Cast Steel Blade, 3 in. Long, ¾ in. Wide..... $2 00

Weight 11½ Lbs. per Dozen

Half Dozen in a Box

EXTRA BLADES FOR ABOVE GAUGES

Each

Length 3 in., Width ⅜ in., Polished Crucible Cast Steel..... $0 20

One Dozen in a Box; Weight ¼ Lb. per Dozen

SADDLERS' SPOKE SHAVES

For Trimming and Smoothing work; Finishing the Edges after Stitching, etc.

SCREW ADJUSTMENT

Each

No. 163—Osborne; Length 10½ in.; Rosewood Stock, Polished Brass Adjusting Screws and Plate, Polished Crucible Cast Steel Blade, Assorted Lengths 2, 2½ and 3 in..... $2.40

Weight 4 Lbs. per Dozen

LIGHT, PLAIN

Each

No. 163½—Osborne; Length 11 in.; Rosewood Stock; Blade may be Adjusted by two Pins at the Back, Polished Crucible Cast Steel Blade, Assorted Lengths 2, 2½ and 3 in..... $1.20

Weight 3 Lbs. per Dozen

Half Dozen in a Box

For Wood Workers' Spoke Shaves, see Tool Dept.

STRAP SLITTERS

The best Device for slitting Crown Pieces, Turn Backs, Overchecks, Martingales, etc., Adjustable Knife, Guides Open 2½ in., will slit Straps in the center 1½x1½ etc., or can be set to slit 1½x⅝ or any other Combination desired, every Harness Shop should have one of these Tools and Piece Workers can save their cost in a very few days. Made of Polished Iron, Length 5 in.; Size of Blade 2x¼ in.

No. 1—Without Gauge Rule Attachment ..... Each $2 50
Weight 2½ Lbs. Each

No. 2—With 12 in. Gauge Rule Attachment ..... Each $3 30
Weight 4 Lbs. Each

One in a Box

STRAP ROUNDERS

For Rounding Checks, Reins, Winker Braces, etc.

Schedule of Sizes of Holes

Size Nos	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Diam of Hole, In	3/16	7/32	¼	9/32	5/16	11/32	3/8	13/32	7/16	15/32	½	9/16	1	1¼	1½

With Thumb Screw for keeping Center from Springing Up

BOSTON PATTERN, WITH BASE

No. 116—With 15 Holes, all Sizes ⅛ to 1¾ in., Length over all 11½ in., Height 4½ in., Iron Polished Top, Japanned Base; Fastens to Bench with 4 Screws ..... Each $15 00

Weight 7 Lbs. Each

WITH BRASS CLIP

No. 109—With 12 Holes, Sizes 1 to 12, ⅛ to ⅞ in.; Length over all 13 in., Height 4 in., Polished Iron, Fastens to Bench with 4 Screws ..... Each $8 80

Weight 4 Lbs. Each

One in a Box; Furnished Promptly from Factory

With Thumb Screw for Keeping Center from Springing Up

No. 110—With 11 Holes, Sizes 1 to 11, ⅛ to ¾ in., Length over all 12½ in.; Height 3½ in.; Polished Iron; Fastens to Bench with 4 Screws ..... Each $7.50

Weight 3¼ Lbs. Each

No. 111—With 11 Holes; Sizes 1 to 11, ⅛ to ¾ in., Length over all 12½ in., Height 3 in., Polished Iron, Fastens to Bench with 4 Screws ..... Each $7 00

Weight 3¼ Lbs. Each

One in a Box

No. 114—With 9 Holes; Sizes 1 to 9, ⅛ to ⅝ in.; Length over all 10 in., Height 2½ in.; Polished Iron, Fastens in a Vise ..... Each $5 00

Three in a Box; Weight 1½ Lbs. Each

MEYERS' STRAP HOLDERS

No. 195—Height 5 in.; made of Iron, Natural Finish; holds any Width of Strap; Fastens to bench or wall with Screws Each $0 80

Weight 1¼ Lbs. Each

Open Stock

RANDALL'S STITCHING HORSES

No. 1912—Height Jaws 17½ in., Width 5 in.; Thickness at Base 3 in.; Sugar Maple Oil Finished Jaw with Steel Spring; Stool Seat is made of 2 in. Poplar, Hollowed, Hickory Legs and Rounds. Each $5 00

Weight 18 Lbs. Each

Open Stock

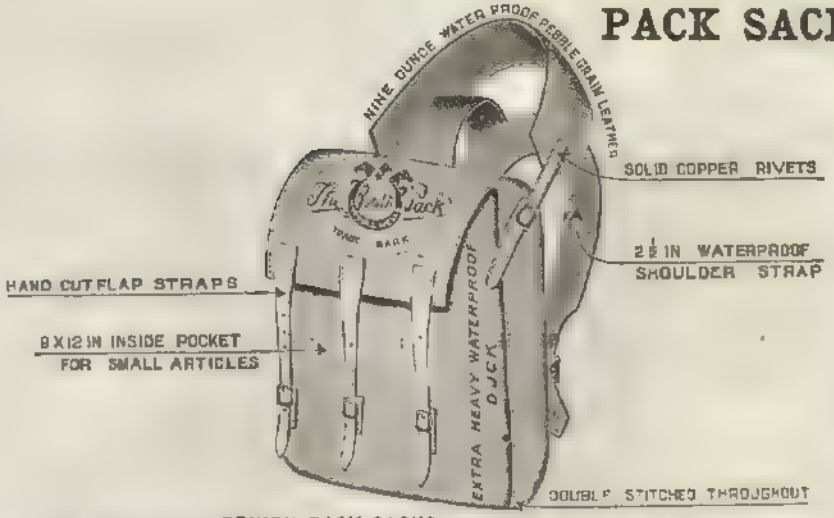
EXTRA JAWS

Can Furnish in any Height

No. 92—Jaw for Randall's Horse; Regular Height 17½ in. is carried in Stock; any other Height made to Order ..... Each $2 80

Weight 5 Lbs. Each

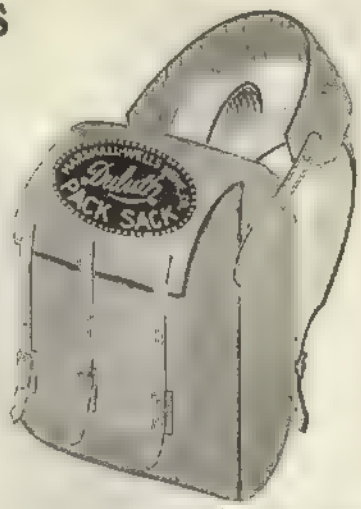
PACK SACKS


NINE OUNCE WATER PROOF PEBBLE GRAIN LEATHER
SOLID COPPER RIVETS
2½ IN WATERPROOF SHOULDER STRAP
HAND CUTFLAP STRAPS
9X12 IN INSIDE POCKET FOR SMALL ARTICLES
EXTRA HEAVY WATERPROOF DUCK
DOUBLE STITCHED THROUGHOUT

ZENITH PACK SACKS

Made of specially [illegible], very closely woven 12 oz. Imperial Brand Waterproof Duck. Extra strong at points of greatest strain. Head and Shoulder Straps made from 9 Oz. Oil Grained Leather, specially treated, [illegible] Lap-over Top fastened with three adjustable leather straps 9x 2 in. Inside Pocket for small articles. A better pack can not be obtained. Pack Sacks, Upper reinforced by hand and double stitched throughout.

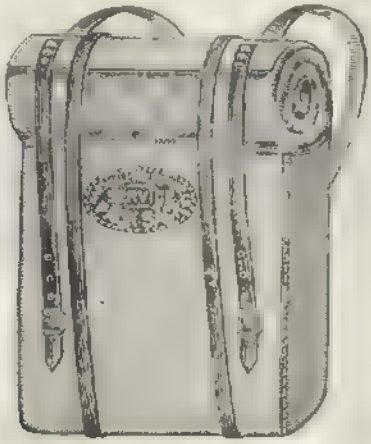
	Per Dozen
No. 1—23 in. Wide, 26 in. Long, Weight 33 Lbs. per Dozen.	$60 00
No. 2—25 in. Wide, 28 in. Long, Weight 34 Lbs. per Dozen ..	60 00
No. 3—27 in. Wide, 30 in. Long, Weight 36 Lbs. per Dozen ..	63 00



DULUTH PACK SACKS

Made from 12 Oz. Brown Duck, 3½ in. Double Thickness Canvas Head Straps, with ⅜ in. Leather Billets, 2¼ in. Collar Leather Shoulder Straps, Lap-over Top fastened with three ⅜ in. [illegible] Leather Lap Straps; Double clinch riveted. This is considered the best Pack ever offered for the money.

	Per Dozen
No. 1D—23 in. Wide, 26 in. Long Weight 30 Lbs. per Dozen	$48 00
No. 2D—25 in. Wide, 28 in. Long Weight 32 Lbs. per Dozen	48 00
No. 3D—27 in. Wide, 30 in. Long Weight 34 Lbs. per Dozen.	48 00



We have made a very careful study of Pack Sack requirements in the Northwest and have embodied in our line, which is made here in our own Factory, every feature necessary to render our Packs of the greatest service to the Cruiser and Sportsman.

SERVICE PACK SACKS

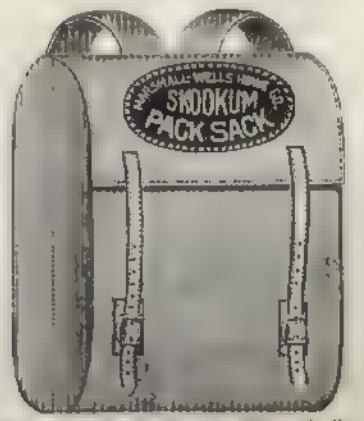
Designed especially for [illegible] Two 9x5 in. Adjustable Leather Carrying Straps to be used for [illegible] sliding large articles after Sack is filled. Flap is cut so as to fit over Pack Holds close to the needle and tight against the body. Made from 9 Oz. Brown Duck with Canvas Shoulder Straps, with 1x8 in. Leather Billets and two 2x20 in. Leather Straps to [illegible]

	Per Dozen
No. 4—24 in. Wide, 28 in. Long. Weight 37 Lbs. per Dozen.....	$48 00

CRUISER PACK SACKS

Recommended for general [illegible] less expensive Sack than our Zenith [illegible] Made from 12 Oz. Brown Waterproof Duck, 3 in. [illegible] Straps and 2½ in. Shoulder Straps, topstitched with three [illegible] of Linen Lock Stitch. Have strengthened with four rows of Waterproof Silk Finished Thread. Shoulder Straps have 1x18 in. and Head Strap 2x [illegible] in. Oak Leather Adjustable Flap over. Flap and [illegible] reinforced with [illegible] in Leather Straps reinforced with double clinch rivets.

	Per Dozen
No. 2C—25 in. Wide, 28 in. Long; Weight 30 Lbs. per Dozen	$42 00



8 Oz. Brown Duck, Double stitched Canvas Shoulder Straps, with 1x18 in. Leather Billets

	Per Dozen
No. 6—Skookum; 24 in. Wide, 26 in. Long Weight 27 Lbs. per Dozen	$30.00

8 Oz. Brown Duck; Double Stitched Canvas Shoulder Straps

	Per Dozen
No. 7—24 in. Wide 24 in. Long, Weight 16 Lbs. per Dozen	$24.00
No. 10—18 in. Wide, 18 in. Long; Weight 11 Lbs. per Dozen..	21.00

HIKERS

8 Oz. Genuine Khaki; Adjustable Khaki Shoulder Straps; Partitioned in Center and Widened at Sides, making a handy small size Sack, but still very roomy. Designed especially for short trips.

	Per Dozen
No 8—16 in. Wide, 18 in. Long Width at Top 14 in.	$24.00

Weight 14 Lbs. per Dozen

DUFFLE BAGS

MARSWELLS

For Clothing and Provisions

Made from 12 Oz. Brown Double Filled, Paraffine Waterproof Duck; Fitted with Inside Neck or Throat Piece of Waterproof Balloon Silk which can be drawn together and tightly tied before closing Bag with outside Cord, making it absolutely tight and waterproof; Light in weight, easy to pack can be carried anywhere and in any way, Accepted and checked as baggage by all railroads; Strong, hand sewed Leather Handles on side and bottom. Each

No. 15—15 in. Diam., 36 in. Long.....$5 00

Weight 2 Lbs. Each

SHELL BAGS

Ten Ounce Duck, with Outside Pocket; Bound Edges; Web Sling Strap

Per Dozen

No. 50B—Holds 50 Shells; Width of Bag 9 in., Depth 7 in.....$6.00
Weight 3 Lbs. per Dozen

No. 75B—Holds 75 Shells, Width of Bag 10 in., Depth 8 in..... 9.00
Weight 3¼ Lbs. per Dozen

No. 100B—Holds 100 Shells; Width of Bag 12 in., Depth 9 in..... 12.00
Weight 4½ Lbs. per Dozen

No. 200B—Holds 200 Shells; Width of Bag 13¾ in., Depth 9 in..... 15 00
Weight 10 Lbs. per Dozen

No. 300B—Holds 300 Shells; Width of Bag 15 in., Depth 10 in..... 18 00
Weight 13 Lbs. per Dozen

Heavy Black Bag Leather, Pigskin Grain; Patent Leather Bound; Has Extra Pocket sewed on in Front; Leather Sling Strap, Reinforced with Shoulder Piece. Per Dozen

No. 150L—Holds 150 Shells; Width 12 in., Depth 8¾ in.....$30.00
Weight 12 Lbs. per Dozen

No. 200L—Holds 200 Shells; Width 13 in., Depth 9 in.. 36 00
Weight 15 Lbs. per Dozen

GAME CARRIERS

For Carrying Ducks, Geese, Partridges and all kinds of Birds. Can be carried in Hand or Thrown on Shoulder

Per Dozen

No. 10—Strap is Canvas Web, 2¼ in. Wide and 9 in Long; Hooks will hold about 16 Birds.....$3.00

Weight 2 Lbs. per Dozen

CARRY-ALL BAGS

Made of Heavy Waterproof Tan Duck; Leather Welts, Russet Leather Lap-over Top with Strap and Padlock Fastening; 1½ in. Russet Leather Strap with Buckle Fastening around Bag; Russet Leather Double Handles at Top and Single Handle at Bottom.

Each

No. 5—32 in. Long, 24 in. Wide, 7 in Deep.....$7.00
Weight 8½ Lbs. Each

SHELL BOXES

Extra Quality Russet Leather, Embossed; Tin Lined, Four Compartments; With Lock and End Straps, Nickel Trimmings. Each

No. 200A—Holds 200 Shells, Length 12 in., Width 6 in., Depth 7½ in.....$7.00
Weight 3¾ Lbs. Each

Each

No. 150—Extra Quality Russet Leather, Embossed, Tin Lined; Compartments, with Lock and Two End Catches; Nickel Trimmings; Holds 150 Shells; Length 13 in., Width 8½ in., Depth 4 in.....$6 00
Weight 3½ Lbs. Each

No. 100—Heavy Russet Leather, Embossed, Tin Lined, Four Compartments, with Lock; Nickel Trimmings, Holds 100 Shells; Length 9 in., Width 8 in., Depth 3¾ in.....$5.00
Weight 2¼ Lbs. Each

MARBLE SAFETY POCKET AXES

For Hunters, Campers, Trapers, Canoeists, Cruisers, Surveyors, etc.; All, except No. 10, have a Spring Hinged, Nickel Plated Steel Guard, lined with Lead, which protects edge when Axe is not in use or folds into groove in underside of Handle when ready to chop.

AXE HEAD, WITH NAIL CLAW

Solid Tool Steel Blade, Highly Tempered, Polished and Sharpened, Nickel Plated Steel Handle with Engraved Hard Rubber Plates; Folding Nail Claw. Per Dozen

No. 2½—Weight 20 Oz. Each; Length 11 in., Length of Head 4 in., Width of Bit 2⅜ in.....$33.00
Two in a Box; Weight 20 Lbs. per Dozen

AXE HEAD PATTERN

Solid Tool Steel Blade, Highly Tempered, Polished and Sharpened; Nickel Plated Steel Handle with Engraved Hard Rubber Plates. Per Dozen

No. 2—Weight 20 Oz. Each, Length 11 in., Length of Head 4 in., Width of Bit 2⅜ in.....$30 00
Two in a Box; Weight 18 Lbs. per Dozen

HATCHET HEAD, HICKORY HANDLE

Solid Tool Steel Blade, Highly Tempered, Polished and Sharpened; Selected Hickory Handle, Steel Lined Groove. Per Dozen

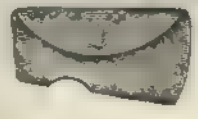
No. 5—Weight 16 Oz., Length 11 in., Length of Head 4½ in., Width of Bit 2½ in.....$18 00
Weight 15 Lbs. per Dozen

No. 6—Weight 22 Oz.; Length 12 in.; Solid Steel Blade, 2⅞x4¾ in.... 18 00
Two in a Box; Weight 20 Lbs. per Dozen

CAMP AXE

Made Forged from Solid Tool Steel; Head is Tempered for driving Spikes, Stakes, etc.; the Eye is accurately Machined and Handle is perfectly Fitted; Nail Puller has Tempered Jaws. Per Dozen

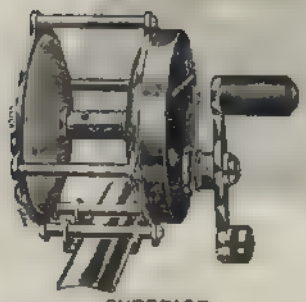
No. 10—Size Blade 3¼x5¼ in., Weight 30 Oz.; Selected Seasoned Hickory Handle, 16 in. Long; Sheath not included $18 00
Two in a Box. Weight 23 Lbs. per Dozen



Each

No. 30—Leather Axe Sheath, for No. 10 Axe.....$0.50

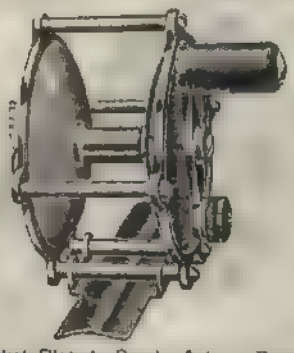
MARSWELLS FISHING REELS



SUPERIOR

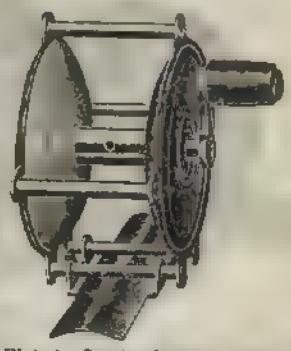
Nickel Plated; Double Multiplying; Metal Cap, Raised Pillars; Adjustable Click and Drag, White Bone Handle.

	Per Dozen
No. 254—Capacity 40 Yds.; 1 in. Pillars, 2 in. Disk	$10 00
Weight 3⅛ Lbs. per Dozen	
No. 256—Capacity 60 Yds.; 1 in. Pillars, 2¼ in. Disk	12.00
Weight 4¼ Lbs. per Dozen	
No. 258—Capacity 80 Yds.; 1¼ in. Pillars, 2⅞ in. Disk	14 00
Weight 4½ Lbs. per Dozen	



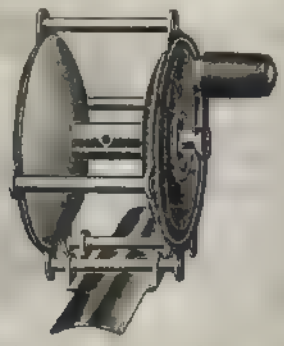
Nickel Plated, Single Action, Raised Pillars; Adjustable Click; Handle Revolving within Raised Metal Rim, Jet Enamel Handle.

	Per Dozen
No. 264—Capacity 40 Yds.; 1 in. Pillars, 2 in. Disk	$ 9.00
Weight 3¾ Lbs. per Dozen	
No. 266—Capacity 60 Yds.; 1 in. Pillars, 2¼ in. Disk	10.00
Weight 4¼ Lbs. per Dozen	
No. 268—Capacity 80 Yds.; 1 in. Pillars, 2 ⅞ in. Disk	11.00
Weight 4½ Lbs. per Dozen	



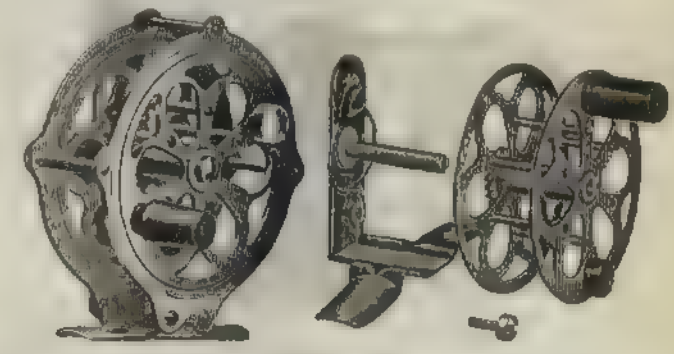
Nickel Plated; Single Action; Raised Pillars; Click; Jet Enamel Handle

	Per Dozen
No. 274—Capacity 40 Yds.; 1 in. Pillars, 2 in. Disk	$5.00
Weight 1 Lb. per Dozen	
No. 276—Capacity 60 Yds., 1 in. Pillars, 2¼ in. Disk	6.00
Weight 1¾ Lbs. per Dozen	



Brass, Single Action; Raised Pillars, Click; Jet Enamel Handle

	Per Dozen
No. 2825—Capacity 25 Yds.; 1 in. Pillars, 1¾ in. Disk	$4.00
Weight 1 Lb. per Dozen	
No. 284—Capacity 40 Yds., 1 in. Pillars, 2 in. Disk	4.50
Weight 1⅛ Lbs. per Dozen	
No 286—Capacity 60 Yds.; 1 in. Pillars, 2¼ in. Disk	5 00
Weight 1¾ Lbs. per Dozen	



LUCKY TROUT

Gun Metal Finish; Single Action, Very Light Weight; Removable Back Sliding Steel Click; Steel Spindle; Quickly taken apart.

	Per Dozen
No 670—Capacity 70 Yds.; Diameter of Spool 2¼ in., Width ¾ in.	$27 00
No. 680—Capacity 80 Yds.; Diameter of Spool 2¼ in., Width 1 in.	30 00
Weight 3¼ Lbs. per Dozen	

GOLDEN WEST FLY CASTING

Single Action; Combines Light Weight, Durability and Efficiency; the Improved Adjustable, Differentiating Click operates with a strong resistance when the Line is going out and with a very light one when reeling in.

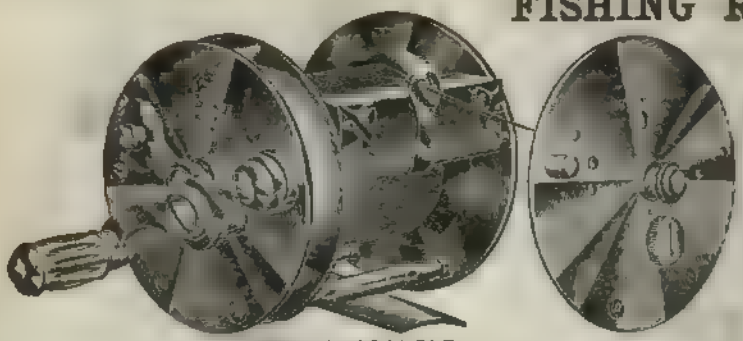
	Each
No. 1134—German Silver Frame; Capacity 60 to 80 Yards; 1⅛ in. Pillars, 2⅛ in. Hard Rubber Disk, interleaved with Aluminum; Steel Pivots, Hard Rubber Handle	$8.00
Weight 5 Oz. Each	
One in a Handsome Jewelers Display Case, with Oil Can, as per Illustration above	

RAINBOW FLY CASTING

Single Action; Very Light Weight and Strong; Frame and Spool of Hard Alloy Aluminum; Click Spring is Strong when fish strikes and line is running out and very light when reeling in; Material, Finish, Workmanship and Construction of Highest Class.

	Each
No. 627—Gun Metal Finish; Capacity 40 to 60 Yards; 1 in. Pillars, Size of Spool 2⅜ in. Diam.; Reel can instantly be taken apart for Cleaning and Oiling	$6 50
Weight 2½ Oz. Each	

FISHING REELS



SUPREME, QUADRUPLE
Level Winding, Free Spool, Anti-Back-Lash

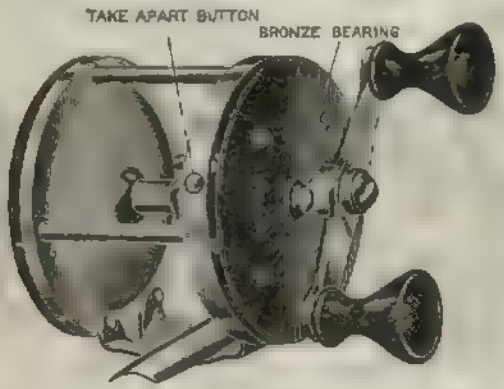
The Level Winding Device is encased to make it sand and waterproof; in the Free Spool Attachment the Gears are always in Mesh and there is no danger of stripping the Teeth; the Clutch automatically takes hold when reeling in and throws out when casting; the Anti-Back-Lash mechanism automatically thumbs the Spool and stops the instant the bait strikes the water; Any tension desired is secured by Adjusting Screw. Each

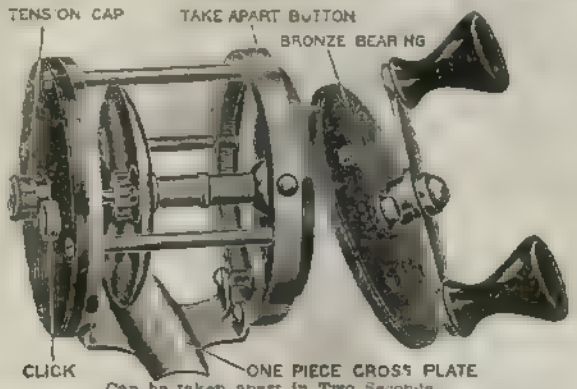
No. 1573—Silverine; Capacity 60 to 100 Yards of Line; 1⅞ in. Pillar, 2¼ in. Disk; Generated Spiral Tooth Gears, Bronze Bushings; Polished Steel Pivots; Adjustable Front Sliding Drag; Pyralin Amber Fluted Handle..... .....$15.00
One in Chamois Leather Bag, Packed in a Fine Leather Case

SOUTH BEND ANTI-BACK-LASH
Bait Casting Without Back Lashing

Does away with Back Lashes, Snarls and Tangles. Reel entirely does away with the necessity of thumbing the Spool and makes Bait Casting simply a matter of throwing the Bait accurately with the Rod. If the Reel is desired to be used as a free running, ordinary type of Casting Reel, it can be changed by a half turn of Adjusting Screw which makes the Anti-Back-Lash Feature inoperative. Guaranteed to give perfect satisfaction without time limitation. Each

No. 1131—Solid German Silver Frame; Capacity 100 Yards; 1⅜ in. Pillars, 2 in. Disk; Very Light, Strong and Rigid..$10.00
Weight 8 Oz. Each





Can be taken apart in Two Seconds

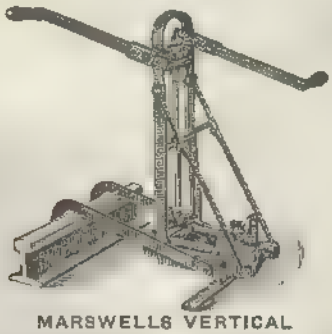
TRITON TAKE-APART MUSKALLONGE

Made of Hard Rubber and German Silver of best quality; The Axles are steel and run in Bronze Bearings. Frame—the strong one piece Cross Plate is solidly riveted to the rigid Truss Frame rims; No stronger, stiffer Frame of its weight has ever been made. The Double Grip Handle eliminates vibration (or wobble) and a perfect balance at all speeds, is attained. The ordinary Handle with Single Grip and balance Knob may be had if so ordered. Each

No. 1T—Capacity 600 Feet of Nine-Thread or 300 Feet of Eighteen Thread Cuttyhunk Line or 100 Yards Braided Silk Muscallonge Line .. .. ..

RAILROAD SUPPLIES

TRACK DRILLS



MARSWELLS VERTICAL

Equipped with Heavy Duty Thrust Bearing Spindle with Regular or Improved Chuck. All Bearings are Bronze Bushed. Gears made from Steel Drop Forgings with Machine Cut Teeth and then Case Hardened. These Gears will Outlast a great many ordinary Iron Gears on other makes. The Improved Chuck takes Flat Rich Bits. Bits can be used down to 2½ in.; Easily Set up or Removed from rail to allow trains to pass. Each

No. 20—With Improved Chuck for Flat Beaded Bit.. $55 00

RICH HIGH SPEED STEEL FLAT BEADED DRILL BITS
For Use in Marswells Track Drills, No. 20

Diam., in.	½	9/16	5/8	11/16	¾	13/16	7/8	15/16	1	1 1/16	1 1/8
Each	$0.95	.95	1.00	1.00	1.05	1 10	1 15	1 20	1.25	1 30	1 40
Diam., in.	1 3/16	1 1/4	1 5/16	1 3/8	1 7/16	1 1/2	1 9/16	1 5/8	1 11/16	1 3/4	1 13/16
Each	$1.45	1.50	1.52	1 55	1 60	65	1 70	1 75	1 80	85	1 90

PAULUS—VERTICAL

The Operator stands erect, getting greater power and less strain; Drill requires no adjustment, always ready for use; can be instantly thrown back out of the way of passing trains; Automatic Feed permits drilling of heaviest rail without stopping.

Each

No. 25—Malleable Iron Frame, Height 33 in., Width 9¾ in., Width at Foot Plate 22 in., Length of Handles 11 in.; Takes 41-64 in. Round Shank Drills from ¾ to 1⅛ in. Diam., Shown on page 645; Wt. 66 Lbs. Each..... $25 00

BELAND—HORIZONTAL

A Thoroughly Reliable Hand Feed Drill, completely meeting all requirements of a Light and Serviceable Tool for drilling all holes for a joint without removing the clamp; Frame fastens under the rail.

Each

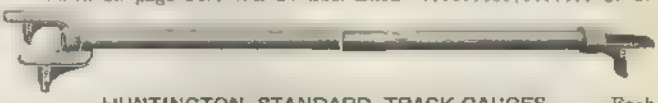
No. 75—Length of Frame 23 in.; Offset from rail 8 in.; Length of Lever 21 in. Wrought Iron Frame, Cast Steel Ratchet with Wood Handle; Takes Ratchet Square Taper Shank Drills shown on page 647; Wt. 26 Lbs. Each $7 50

ADJUSTABLE SPIRIT TRACK LEVELS

Each

No. 500—Made of White Pine 1¾x5½ in., 6 ft. 2 in. long with Steel Band, Patented. Spirit Glass is set in top and protected by Handle. One end is cut in steps and used to obtain proper elevation at curves..... $5 00

Weight 9 Lbs. Each

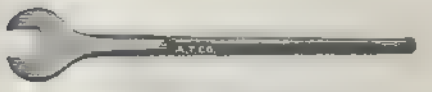


HUNTINGTON, STANDARD, TRACK GAUGES

Each

No. 200—Gas Pipe Steel, Length 5 ft. over all. Taper Threaded at Both Ends to which Malleable Iron Prongs are Screwed and Pinned through to Secure. The Two Lugs at Forked End, Bearing the Flange Edge of Rail, Secure at once a True Right Angle. The Frequent Inaccuracies at Frogs, Curves and Switches due to the use of Ordinary Gauges are obviated..$2 00

Weight 12 Lbs. Each



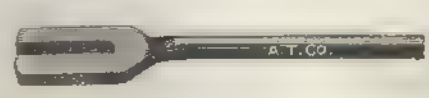
TRACK WRENCHES

Solid Steel, Oil Finish, Length 24 in.; Track Bolts.

Per Pound

No. 1—For ⅝ in. Nuts, 1¼ in. Opening $0 25
No. 2—For ¾ in. Nuts; 1⅜ in. Opening .25
No. 3—For ⅞ in. Nuts; 1½ in. Opening. .25
No. 4—For 1 in. Nuts 1⅝ in. Opening. .25

Weight 4½ to 6½ Lbs. Each



RAIL FORKS

Solid Steel, Oil Finish; For moving Rails Laterally

Per Pound

No. 5—Length 32 in.; Slot 6x⅞ in $0 25

Weight 15 Lbs. Each

RAIL TONGS

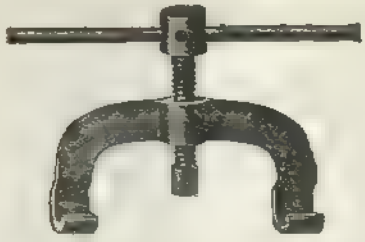
Drop Forged, Solid Steel, Oil Finish
For Carrying Rails of all Sizes and Beams

Per Pound

No. 6—Length 42 in., Drop 13 in.. $0 30

Weight 16 Lbs. Each

RAIL BENDERS OR STRAIGHTENERS



JIM CROW, HEAVY PATTERN

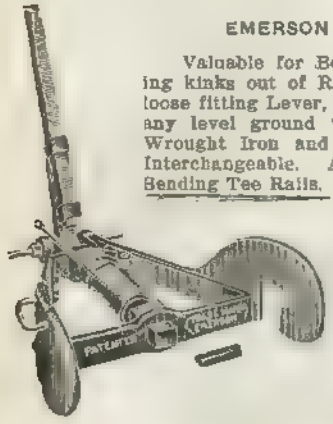
Best Wrought Iron, with Machine Cut, Square Thread, Steel Screw with Bar

Nos.	For Rail, Lbs.	Diam. Screw, In.	Span In.	Weight Each, Lbs.	Each
10	12 to 25	2	19	67	$25.00
20	25 to 45	2¼	23	98	30.00
30	40 to 60	2½	28	145	35.00

ECCENTRIC

Bends or Straightens Rails, Girders, Bars, etc., on Level Ground or Graded Track; Wrought Iron Frame

	Each
No. 11—For 16 to 25 Lb. Rail; Weight 85 Lbs. Each	$ 50.00
No. 12—For 25 to 45 Lb. Rail; Weight 140 Lbs. Each	75.00
No. 13—For 45 to 65 Lb. Rail; Weight 190 Lbs. Each	90.00
No. 14—For 65 to 85 Lb. Rail; Weight 300 Lbs. Each	100.00
No. 15—For 85 to 100 Lb. Rail; Weight 350 Lbs. Each.	125.00



EMERSON TEE RAIL BENDERS

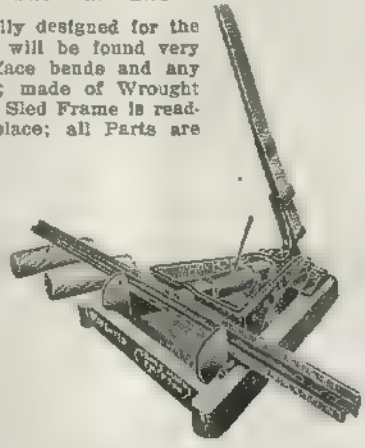
Valuable for Bending Rails as well as for taking kinks out of Rails already laid; operated by a loose fitting Lever, 8 to 9 ft. Long. Can be used on any level ground where a rail can lie. Made of Wrought Iron and Wrought Steel. All parts are Interchangeable. An excellent Portable Tool for Bending Tee Rails.

	Each
No. 1—For Tee Rails up to 45 Lbs.	$150.00
No. 2—For Tee Rails, 45 to 65 Lbs.	175.00
No. 3—For Tee Rails, 65 to 90 Lbs.	215.00
No. 4—For Tee Rails, 90 to 115 Lbs.	269.00

Weights 220, 275, 375 and 520 Lbs. Each

EMERSON UNIVERSAL RAIL BENDERS

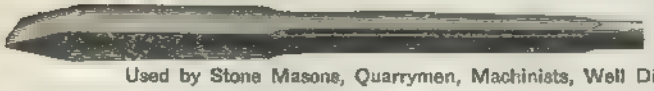
This Machine is especially designed for the Yard or Terminal Use, and will be found very valuable for taking out surface bends and any other irregularities in Rails; made of Wrought Iron and Wrought Steel; the Sled Frame is readily moved to any desired place; all Parts are Interchangeable.

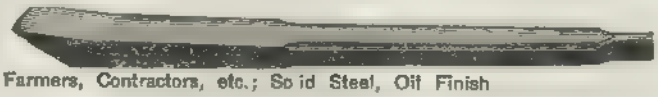


	Each
No. 23—For Tee Rails, up to 70 Lb., 6 in. High; Complete with Wooden Frame Rollers, Lever, Rod and Block; Wt. 453 Lbs.	$250.00
No. 24—For 90 to 100 Lb. Tee Rail 5 to 6 in. High; Complete with Wooden Frame, Rollers, Lever, Rod and Block; Wt. 643 Lbs.	300.00
Dies—For Nos. 23 and 24. Half Set or Two Dies for One Side of Rail	10.00

Send Tracing or Blue Print with Orders for Benders and Dies

BARS





Used by Stone Masons, Quarrymen, Machinists, Well Diggers, Farmers, Contractors, etc.; Solid Steel, Oil Finish

No. 12W—WEDGE POINT, CROW BARS

Weight, Lbs.	10	12	14	16	18	20	22	24
Size in Square, In.	1	1⅛	1⅛	1¼	1¼	1¼	1⅜	1⅜
Length, Ft.	4	4⅛	4½	4⅜	5	5⅛	5⅛	5½

Per Pound, All Sizes $0.12

No. 12P—PINCH POINT, CROW BARS

Weight, Lbs.	10	12	14	16	18	20	22	24
Size in Square, In.	1	1⅛	1⅛	1¼	1¼	1¼	1⅜	1⅜
Length, Ft.	4	4⅛	4½	4⅜	5	5⅛	5⅛	5½

Per Pound, All Sizes $0.12

RAILROAD LINING BARS

Used by Track and Section Men for Lining up and Prying Rails into Position

	Per Pound
No. 12L—Weights 20 to 30 Lbs.; Solid Steel, Oil Finish	$0 12

RAILROAD TAMPING BARS

Used in Track Laying and for Driving Ballast firmly under Ties

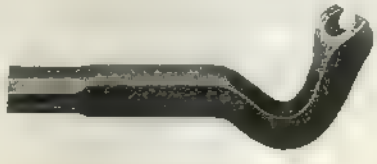
	Per Pound
No. 16T—Weights 14 to 18 Lbs.; Solid Steel, Oil Finish	$0.16

RAILROAD CLAW BARS

Solid Steel; Oil Finish; For Drawing Spikes from Ties, etc.

Regular Pattern, with Heel

	Per Pound
No. 20R—For ⅜ in. R. R. Spikes; Weights 20 to 23 Lbs.	$0.16
No. 24R—For ⅞ and ½ in. R. R. Spikes; Weights 24 to 26 Lbs.	.16
No. 27R—For ⅞ in. R. R. Spikes; Weights 27 to 30 Lbs.	.16



GOOSE NECK

	Per Pound
No. 22—Assorted Weights 25 to 26 Lbs.	$0.22

REACH BODY PROTECTORS

For Catchers and Umpires, also Suitable for Goal Keepers in Hockey and Polo Matches, constructed so as not to interfere in any way with the movements of the Wearer, yet furnish absolute Protection. With the exception of Nos. 2P and 3P, all have Nickel Plated Valve for inflating the air cushions; are Light Weight and when deflated can be carried in small space.

The Sullivan Body Protector Made entirely of Army Khaki, the strongest Light-Weight material made; Chambers or Reeds Padded with Deer Hair, and being Laced all around the edge, enables the user to adjust padding if desired; Extra Pad over Shoulder, thoroughly protecting the whole body. Straps are adjustable so that it will conform nicely with the body. No Blowing Up, consequently no leaks. Each

No. SP—Men's; Length 28 in., Width 19 in $10 00

One in a Box; Weight 3 Lbs. Each

Professional Pneumatic, made of Pure Para Rubber, Covered with heavy White Duck, Silk Bound; Body Strap Extends Entirely Around Protector.

Each

No. 10P—Men's; Length 28 in., Width 19 in.....$12.00

One in a Box; Weight 3 Lbs. Each

Pneumatic, made of best Quality Rubber, covered with Heavy White Duck, Body Strap extends entirely around Protector.

No. 6P—Men's, Length 28 in., Width 19 in $9 00

One in a Box; Weight 3 Lbs. Each

League Pneumatic, made of Durable Gray Colored Material with Heavy Coating of Rubber Inside, Body Strap Extends Entirely around Protector.

Each

No. 1P—Men's, Length 28 in., Width 19 in.... .... $7 50

Amateur Pneumatic; Olive Cloth with Medium Coating of Rubber Inside; Half Strap around Back only Each

No. 1AP Men's, Length 27 in Width 18 in . $5 00

One in a Box, Weight 2½ Lbs. Each

Pneumatic, Khaki Cloth covering with Good Rubber Lining, Half Strap around Back only.

Each

No. 2AP—Men's; Length 27 in., Width 18 in..... $5 00

One in a Box; Weight 2½ Lbs. Each

Men's

Boys'

The No. 2P is made of Heavy Brown Canvas with Heavy Reeds to break the force of blow (not pneumatic); Padded with Best Felt; Half Strap passing around Back only. The No. 3P is made of Heavy Canvas Padded with Best Felt

Each

No. 2P—Men's; Length 27 in., Width 18 in $1 50

Open Stock; Weight 1⅝ Lbs. Each

Each

No. 3P—Boys', Length 22 in., Width 13 in. . . . $1 00

Open Stock; Weight 1¼ Lbs. Each

REACH UNIFORM BAGS

Each

No. F—Made of Tan Canvas with Leather Straps and Handle, Leather Bound Edges, Separate Compartment for Shoes Holds One Uniform; when Rolled up is 24 in. Long..... ....$3.00

Weight 2 Lbs. Each

Open Stock

REACH BAT BAGS

Club Size; Made of Extra Heavy Brown Canvas, Brown Leather Trimmings to Match, Extra Strong Bag.

Each

No. BB1—To Hold Twelve Bats..... $3 50

No. BB3—To Hold Six Bats..... 2.50

One in a Box; Weight, No. BB1, 3 Lbs.; No. BB3 2 Lbs. Each.

Each

No. BB4—Individual Size; Strongly made of fine Brown Tan Leather; Holds Two Bats $2.00

One in a Box; Weight 1¼ Lbs. Each

Each

No. BB5—Individual Size; Made of Heavy Brown Canvas, Leather Capped at both ends..... $1 50

One in a Box; Weight 1 Lb. Each

Each

No. BB6—Individual Size; Made of Heavy Brown Canvas, Leather Capped at one end.... .. $1.25

One in a Box; Weight 1 Lb. Each

Each

No. BB7—Individual Size; Made of Heavy Khaki Canvas, Leather Trimmed....$1.00

One in a Box; Weight 1 Lb. Each

REACH BASE BALL GOODS

BASES — Per Set of 3

No. E1—League; Extra Heavy Double White Canvas Bases; Canvas Strap; Well Stuffed and Quilted; Straps Extra Strong; Complete with Spikes.....$6.00
One Set in a Bundle; Weight 5 Lbs. per Set

No. E3 Amateur; Heavy White Canvas; Well Stuffed, Strong Straps; Complete with Spikes, Per Set of 3.....$3.50
One Set in a Bundle; Weight 4 Lbs. per Set

Per Set of 3

No. E4—Special Quality; Heavy Durable Canvas with Leather Reinforced Around Opening; not Stiffened, made to be Filled with Sand or Hay; Can be Emptied when Desired and Carried in a very Small Space; Three in a Set...$1.50
One Set in a Bundle, Weight 1⅓ Lbs. per Set

HOME PLATES

Each

No. HC—Composition; Strong, Regulation Size and Shape; Complete with Pins..$6.00
Wrapped Separately; Weight 15 Lbs. Each

SHOE PLATES

Special, Extra Quality Steel, Hand Forged, Tempered and Sharpened; Beveled Edges, the Ribs are Reinforced to increase the Strength.

Doz. Pairs
No. 1T—Toe Plates.....$6 00
No. 1H—Heel Plates..... 6 00

SHOE PLATES

League, Best Quality Steel, Beveled Edges and Sharpened Points; will not Bend or Break.

Doz. Pairs
No. 2T—Toe Plates.....$3.00
No. 2H—Heel Plates..... 3.00

SHOE PLATES

Amateur, Good Quality Steel, Not Sharpened; Strong and Durable.

Doz. Pairs
No. 6T—Toe Plates.....$1.20
No. 6H—Heel Plates..... 1.20

One Pair in an Envelope, One Dozen Pairs in a Box, Weight 1¾ Lbs. Per Dozen

PITCHERS' TOE PLATES

Affords Protection to the Shoe and is a most valuable assistant to the Pitcher; used by all Professionals and Amateurs.

Per Dozen
No. 5TR Aluminum, for Right Shoe ... $3.00
No. 5TL Aluminum, for Left Shoe ... 3.00
One in an Envelope; One Dozen in a Box
Weight ¾ Lb. per Dozen

SCORE BOOKS

The Harry Wright System; Complete Directions for Scoring Printed in each Book

Pocket Size, 6¾x4 in.

Nos.	1SB	2SB	3SB
Style Cover	Paper	Paper	Cloth
No. of Games	7	22	50
Weight Dozen, Lbs.	¾	2	3
Per Dozen	$1.20	3 00	6.00

Club Size, 12⅞x8⅞ in.

Nos.	4SB	5SB
Style Cover	Cloth	Cloth
No. of Games	30	60
Weight Dozen, Lbs.	11	15
Per Dozen	$12 00	18 00

Open Stock

SCORING TABLETS

Per Dozen

No. 200—For Recording Runs and Outs; Made of Celluloid; Vest Pocket Size, 3x1⅝ in.....$3.00

GUIDES

Containing Everything the Fan wants to know about Base Ball; Complete Records of the American, National and Minor Leagues.

Per Dozen
No. 120G Base Ball Guides.....$1.20

PERCENTAGE BOOKS

Per Dozen

No. 120P—This Book contains a Table of Averages to be used in ascertaining the Standing of the Teams in a League.....$1.20

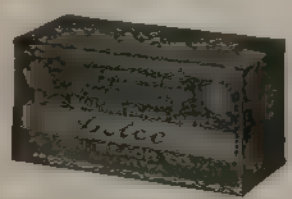
Open Stock

UMPIRE INDICATORS

Per Dozen

No. 400—For Recording number of Strikes and Balls; Made of Celluloid; Vest Pocket Size, 3x1¼ in..$6.00

One in a Box; Weight 1 Lb. per Dozen



"DOLCE" LEATHER PRESERVATIVE

Per Dozen Tubes

No. 10—The best preparation known for use on Base Ball Mitts and Gloves; Will Soften and Preserve the Leather; Makes the Pocket of Glove Soft and Pliable, and enables the player to secure a grip on ball with one hand.....$1.20

One Tube in a Box; One Dozen Boxes in a Carton; Weight 1¾ Lbs. per Dozen

For Supporters and Guards of All Kinds, See Page 3077

REACH RUGBY FOOT BALLS

This Trade Mark is found only on Perfect Goods.

All Reach Foot Balls are, by a Patented Process, made with a Perfect Shape, and are Guaranteed to retain that shape. Rugby Regulation Size is 23 to 24 in. circumference.

VARSITY

Endorsed by the Leading Colleges, Universities and Athletic Associations

Per Dozen

No. E5—Regulation Size, made of Specially Selected Tuf-Ide Leather, Tanned expressly for use in this Ball, insuring a perfect shape Ball, Canvas Lined, Double Stitched Around Opening, Special Pure Para Rubber Bladder complete with Rawhide Lace and Lacing Needle, Each Ball is carefully inspected and tested and is guaranteed to conform strictly to the Official Rules $72 00

One in a Box; Weight 22 Oz. Each

INTER-COLLEGIATE

Per Dozen

No. 5—Regulation Size; made of Selected Pebble Grain Cow-hide Leather, Canvas Lined; Pure Para Rubber Bladder; Leather Lace and Lacing Needle $60.00

One in a Box; Weight 22 Oz. Each

RUGBY MATCH

Per Dozen

No. 5R—Regulation Size; made of Superior Pebble Grain Cow-hide Leather, Canvas Lined; Pure Para Rubber Bladder; complete with Leather Lace and Lacing Needle $48.00

One in a Box; Weight 18 Oz. Each

ACADEMIC MATCH

Per Dozen

No. 5C—Regulation Size; made of Fine Pebble Grain Leather, Canvas Lined; Pure Para Rubber Bladder; complete with Leather Lace and Lacing Needle $42.00

One in a Box; Weight 18 Oz. Each

SCHOLASTIC RUGBY

Per Dozen

No. 5F—Regulation size; made of Fine American Pebble Grain Cow-hide Leather, Canvas Lined; Pure Para Rubber Bladder; complete with Leather Lace and Lacing Needle $36.00

One in a Box; Weight 18 Oz. Each

SPECIAL RUGBY

Per Dozen

No. 5H—Regulation Size; made of Selected Pebble Grain Leather, Canvas Lined; Para Rubber Bladder; Holes Eyeleted $30 00

One in a Box; Weight 18 Oz. Each

AMATEUR RUGBY

Per Dozen

No. 5S—Regulation Size; made of Fine Pebble Grain Leather, Canvas Lined; Rubber Bladder.... $24.00

One in a Box; Weight 14 Oz. Each

PRACTICE RUGBY

Per Dozen

No. 5M—Regulation Size; made of Pebble Leather, Canvas Lined; Rubber Bladder..... $18.00

One in a Box; Weight 12 Oz. Each

YOUTH'S RUGBY

Per Dozen

No. 5O—Regulation Size; made of fine Brown Grain Leather, Canvas Lined; Guaranteed to hold its shape; Pure Rubber Bladder $12.00

One in a Box; Weight 12 Oz. Each

FOOT BALL GOODS

REACH HEAD HELMETS OR HARNESS

These Helmets provide absolute protection to the Head and Ears, and are endorsed by the leading Universities and Colleges.

Per Dozen

No. 0—Made of Finest Grain Leather, Lined with the Best White Felt, Well Ventilated; Adjustable to fit any sized Head..... $54 00

One in a Box

Weight 15 Lbs. per Dozen

Per Dozen

No. 3—Made of Soft Brown Leather, Lined with Felt, Extra Strong, Well Ventilated; Adjustable to fit any sized Head $24 00

One in a Box

Weight 10½ Lbs. per Dozen

RUGBY FOOT BALL BLADDERS

Made of Pure Para Rubber

Per Dozen

No. E5—For Rugby Foot Balls, No. E5 ..... $15 00

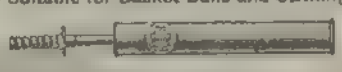
No. 5R—For Rugby Foot Balls, Nos. 5, 5R and 5C..... 12 00

No. 5S—For Rugby Foot Balls, Nos. 5F, 5H, 5S, 5M and No. 5O 9 00

One in an Envelope; Weight 4 Oz. Each

FOOT BALL INFLATORS OR PUMPS

Also Suitable for Basket Balls and Striking Bags



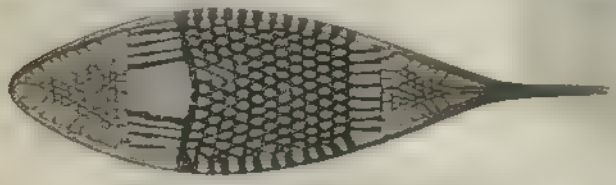
Per Dozen

No. 1—Nickel Plated Brass; Cylinder 5½ in. Long, ⅞ in. Diameter; Extreme Length Closed, 7¼ in. $5 00

Open Stock; Weight 2 Lbs. per Dozen

SNOW SHOES

Made from our own Patterns found by experience to be the best suited for all conditions of snow and country. Frames are Selected, well Seasoned Hardwood, Split and Shaved by hand in order to take best advantage of grain. **Copper Riveted.** Bent on Correct Lines. Reinforced with Two Cross Bars. Stringing or Web is made of strips of Selected Hides, treated by Special Process so that when wet will not sag or stretch; **Retains its original firmness under all conditions.**



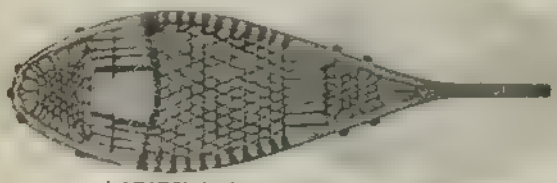
HUNTERS' AND TRAPPERS' PATTERN

	Per Pair
No. 1448—14x48 in., Bent Toe	$8.00
No. 1551—15x51 in., Bent Toe	9.00

ALASKA TRAPPER

	Per Pair
No. 1260—12x60 in.; Special Northwestern Pattern	$11.00

Average Weight About 4½ Lbs. per Pair



LADIES' AND YOUTHS' PATTERN

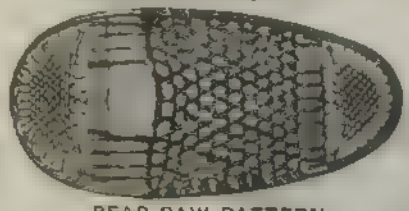
	Per Pair
No. 1242—12x42 in., Bent Toe, Worsted Tufts	$7 00

Weight 3½ Lbs. per Pair

WOODSMEN'S PATTERN

	Per Pair
No. 1446—14x46 in., Bent Toe	$8 00

Weight 4½ Lbs. per Pair



BEAR PAW PATTERN

	Per Pair
No. 1524—15x24 in.	$7 00
No. 1526—15x26 in.	7 50
No. 1531—15x31 in.	8 00
No. 1533—15x33 in.	8.50

Weight About 3¾ to 4½ Lbs. per Pair

SNOW SHOE BINDINGS

	Per Pair
No. 461—Special Tanned First Quality, Leather Binding with Ankle Strap, giving free movement with perfect control of shoe; Strong and Durable and Quickly Adjusted.	$1 50

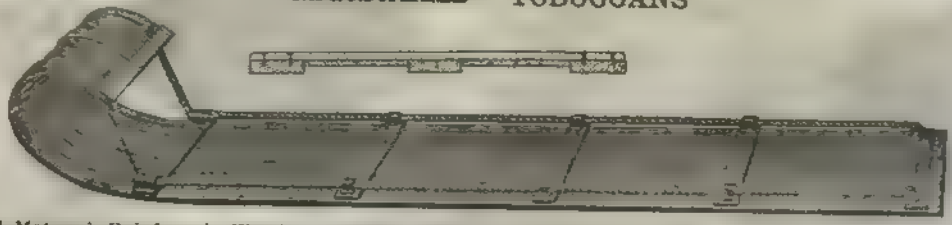
MOCCASINS

Made of Extra Fine Jack Buck, well Sewed, Bellows Tongue, Suitable for Snow Shoeing, Skiing, Tobogganing and general winter wear. **When ordering, be sure to give Sizes wanted.**

	Per Pair
No. 251—Men's High Top, Sizes 6, 7, 8, 9, 10, 11, 12, 13 and 14	$5.00
No. 151—Boys' or Ladies', Sizes 3, 4 and 5	4.50

Average Weight 1 Lb. per Pair

MARSWELLS TOBOGGANS



Made of Selected Material Reinforced, Finished in Natural Wood and Oiled; Our Marswells Toboggans are built so that three of the Slats project ⅛ in. below the Plane of the rest, forming the Running Surface. Having less Sliding Surface, less Friction is caused, thus greatly adding to the speed of the Toboggan and rendering it easy to steer and always under full control. Continuous ½ in. Cotton Rope, securely held with Leather Loops

	Each
No. 4— 4 ft. Long, 16 in. Wide; Weight 10 Lbs. Each	$ 6.00
No. 5— 5 ft. Long, 18 in. Wide; Weight 13 Lbs. Each	7 00
No. 6— 6 ft. Long, 18 in. Wide, Weight 15 Lbs. Each	8 50
No. 7— 7 ft. Long, 18 in. Wide; Weight 18 Lbs. Each	9 50
No. 8— 8 ft. Long, 18 in. Wide; Weight 20 Lbs. Each	11 50
No.110—10 ft. Long, 18 in. Wide; Weight 24 Lbs. Each	14 00

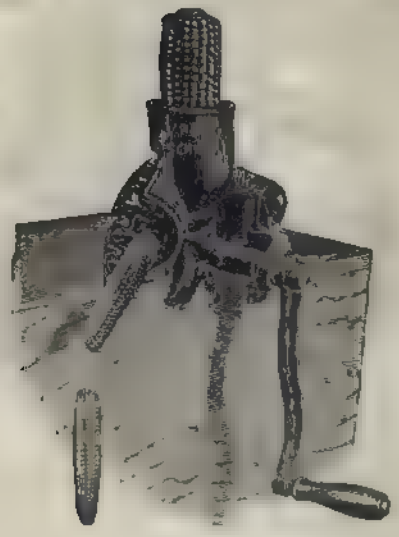
Two in a Bundle

TOBOGGAN CUSHIONS

	Per Foot
No. 10—Made from 8 Oz. Brown Duck	$0.50

CORN SHELLERS AND GRINDING MILLS

CORN SHELLERS

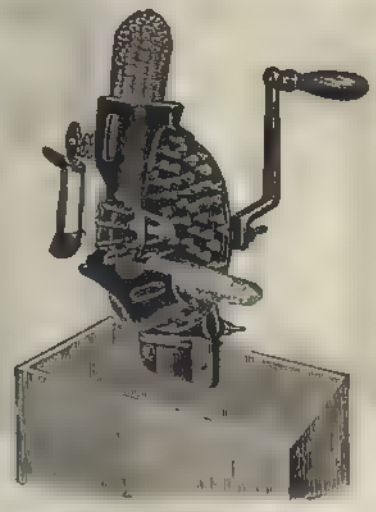


RED CHIEF

A High Grade Sheller built for Service and Results. It has Patent Teeth which do not injure the Corn but push the Grain off and leave the Cob clean and the Kernels whole. Very Light and Easy Running and Substantially built throughout.

	Each
No. 2—Red Chief Corn Sheller	$2 30

Weight 12 Lbs. Each



STAR

A medium priced, simple and durable Sheller for small users. The handle is placed in the center of the disc, making a steady motion of the disc, and doing away with all danger of side motion. This Sheller is equipped with clamps for fastening, thus enabling the user to readily move Sheller from place to place if desired.

	Per Dozen
No. 1—Cast Iron Japanned	$16.00

Weight 150 Lbs. per Dozen

CORN SHELLERS

SQUARE FRAME, ONE HOLE CORN SHELLER

A reasonable priced Sheller, durable and well constructed. The frame work is hardwood, strongly joined together with mortise and tenon joints; the Shafting is cold rolled Steel, and all parts are properly proportioned. The Gearing is placed outside the Frame so that it cannot become clogged, but is protected by a Hood or Cover so that all danger is avoided. This Sheller can be adjusted so as to shell any kind of corn and shell it clean.

	Each
No. 3—Complete with Fan and Feed Table	$9 20

Weight 120 Lbs. Each

GRINDING MILLS

RED CHIEF GRINDING MILL

An Ideal Mill for Cracking Grain or Corn of any kind for Poultry and Stock; will also Grind the finest Meal and Graham Flour. Fine for Grinding Coffee and Spices.

	Each
No. 4—Red Chief Grinding Mill	$4 30

Weight 15 Lbs. Each

HAND AND POWER FEED CUTTERS

LEVER FEED CUTTER

Box is made from thoroughly Seasoned Hardwood; well put together and nicely finished. Has Circle Knife with device for Holding and Adjusting which always gives a Clear Cut. Also has Gauge Plate to govern length of Cut. A High Grade Tool.

	Each
No. 9—Lever Feed	$7 50

Weight 60 Lbs. Each

This is a very popular Hand Cutter and contains all the important features of the larger sizes, such as the change in the length of cut without changing gears, safety stop lever, etc.

The Frame is made of hard wood with mortise and tenon joints. The Feed Table is broad, deep and of good length. The Feed Rolls are governed by an equalizer bar and spring so that both ends of Feed Rolls are raised equally and there is no binding in the boxes. This machine has the Adjustable Cone Gearing by which length of cut is changed It has two 8¼ in. Knives made of Tempered Steel. The Knives make a downward shearing cut against a hardened cutting bar, ground true. The length of cut is adjustable—¼, ⅝ or 1 inch.

Capacity per Hour

Dry Fodder, 150 to 200 Lbs.; Green Fodder, 300 to 400 Lbs.

	Each
No. 07—Complete, as shown	$20 00

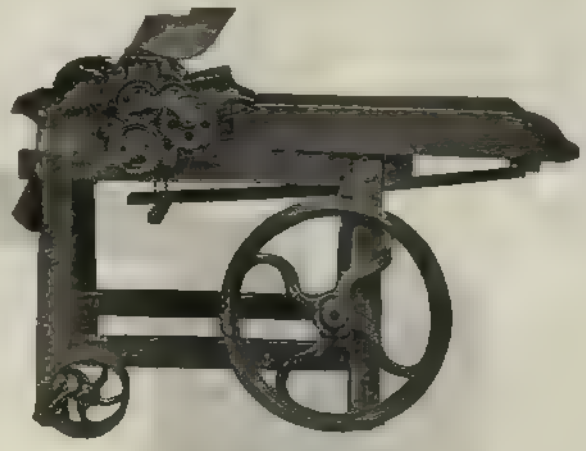
Weight 170 Lbs. Each

The Frame is hard wood and well finished. The machine has one 11½ in. Knife which makes a downward shearing cut against a hardened cutting edge. The length of cut is adjustable from ⅜ to 1½ inches.

Capacity per Hour—Dry Fodder, 150 to 200 Lbs.; Green 300 to 400 Lbs.

	Each
No. 05—Complete, as shown	$14 00

Weight 170 Lbs. Each



POWER FEED CUTTER

The large Feed Throat reduces the labor of feeding. The Feed Rolls are large and the pressure is controlled by a Spring Board acting on an Equalizer Bar preventing all cramping or binding in boxes.

This Cutter is furnished with Four 11½ in. Knives which make a downward shearing cut against a reversible tool steel cutting bar. It provides Four Cutting Edges, all of which can be used before it is necessary to regrind. **The Knives and Cutting Bar are Tempered Tool Steel.** The Knives are removable and adjustable and can be sharpened without removing from the heads. The Feed Gearing consists of a Shifting Cone Gear, which can be quickly moved on its shaft to make any length of cut. All the running parts of the machine are controlled by the Safety Stop Lever, except the Cylinder, and can be instantly stopped or started. The main Shaft is extended on both sides so that either balance wheel or pulley can be placed on either side. Can be used as a Hard Cutter by putting a Crank on the main Shaft. Crank is extra and is furnished only when ordered

Length of Cut—¼, in., ½ in., ¾ in. or 1 in. By removing two opposite knives length of cut will then be ½ in., 1 in., 1½ in. or 2 in.

Capacity per Hour—Dry Fodder, 1 to 1½ Tons; Green Fodder, 2 to 3 Tons.

Power Required—1 to 2 Horse Power.

Speed—400 to 500 Revolutions per Minute.

No. 11—Complete, as shown, with 10 in. Diam., 4 in. Face Pulley; Weight, Complete with Pulley, 380 Lbs. Each	$40 00
Crank for Above Cutter	1 20
Shredder Head for Above Cutter	16 20

Prices furnished on application on Power, Feed and Ensilage Cutters, wood frame and steel enclosed Ensilage Carriers, Blower Elevators for getting ensilage into a silo, and Power Corn Shellers

RELIABLE REFRIGERATORS

Hardwood, Golden Oak Finish

Made of thoroughly Seasoned Hardwood, preventing open joints or warped and shrunken parts, finished in rich Golden Oak and Varnished. The Insulation consists of Outside Casing, Charcoal Sheathing and Dead Air Space, Inside Body of Odorless Wood and Galvanized Steel Lining; The Flues, Waste or Drain Pipe, Ice Rack and Provision Shelves are made of Galvanized Steel, Racks can be easily removed, making the Refrigerator easily cleanable and sanitary. The Hinged Base Board facilitates the removal of the Drip Pan beneath the Refrigerator. The Casters are strong and self-containing. The Lining throughout is Galvanized Steel which is stronger and more durable than Zinc. Gilt Bronze Finish Hinges and Latches.

WITHOUT WATER COOLER
Side Icer Style

	Each
No. 77E—White Enameled Lined	$43 20

Height 43½ in., Width 33 in., Depth 18 in.; Ice Chamber 13¼x13¼x18 in.; Large Provision Chamber 30x13¼x13¼ in., Small Provision Chamber 8¼x13¼x13¼ in.; Ice Capacity 75 Lbs., Weight 156 Lbs.

APARTMENT STYLE

Suitable for use where floor space is limited. Owing to its height, the capacity is as great as those of more width and depth, but not so high.

Galvanized Steel or Enameled Lining; Two Removable Galvanized Provision Shelves, Both Ice Chamber and Provision Chamber have a Single, Paneled Door; Mounted on Casters, Porcelain Lined Water Cooler.

	Each
No. 80—Galvanized Steel Lined	$31.60
No. 80E—White Enameled Lined	34.65

DIMENSIONS

Height 51 in., Width 25 in., Depth 17½ in.; Size Ice Chamber, Height 16 in., Width 16½ in., Depth 12¾ in.; Ice Capacity 70 Lbs. Size Provision Chamber, Height 20½ in., Width 18¾ in., Depth 12¾ in.

One in a Crate; Weight 140 Lbs.

	Each
No. 70E—White Enameled Lined	$16.00

DIMENSIONS

Height 37 in., Width 22¾ in., Depth 15 in.; Size Ice Chamber, Height 13¾ in., Width 10 in., Depth 8½ in.; Ice Capacity 25 Lbs.; Provision Chamber, Height 16 in., Width 12½ in., Depth 10 in.

One in a Crate; Weight 76 Lbs.

WITHOUT WATER COOLER

	Each
No. 71—Galvanized Steel Lined	$19 50
No. 71E—White Enameled Lined	22.15

Height 39½ in., Width 24 in., Depth 15½ in.; Ice Chamber 10½x15½x10½ in., Provision Chamber 14x17¾x10½ in.; Ice Capacity 45 Lbs.; Wt. 104 Lbs.

No. 72—Galvanized Steel Lined	$24.40
No. 72E—White Enameled Lined	27.15

Height 42 in., Width 26 in., Depth 16½ in.; Ice Chamber 11x17½x11½ in.; Provision Chamber 15½x19¾x11½ in.; Ice Capacity 60 Lbs.; Weight 117 Lbs.

No. 73—Galvanized Steel Lined	$29.35
No. 73E—White Enameled Lined	32.30

Height 44 in., Width 29 in., Depth 17½ in.; Ice Chamber 11x19½x12 in.; Provision Chamber 17½x22¾x12 in.; Ice Capacity 75 Lbs.; Weight 138 Lbs.

No. 74E—White Enameled Lined	$36.99

Height 46 in., Width 31 in., Depth 18½ in.; Ice Chamber 11x21½x13 in.; Provision Chamber 19½x24¾x13 in.; Ice Capacity 90 Lbs.; Weight 156 Lbs.

WITH WATER COOLER; WHITE ENAMELED LINED
Porcelain Lined Water Cooler, Faucet and Tumbler Holder

	Each
No. 371E—Same Dimensions as No. 71, Ice Capacity 30 Lbs. Weight 114 Lbs.	$26 60
No. 372E—Same Dimensions as No. 72E, Ice Capacity 45 Lbs. Weight 127 Lbs.	32 15
No. 373E—Same Dimensions as No. 73E; Ice Capacity 60 Lbs. Weight 148 Lbs.	32 55
No. 374E—Same Dimensions as No. 74E, Ice Capacity 75 Lbs.; Weight 166 Lbs.	42 35

All Above, One in a Crate

Ice Capacity given is Actual Capacity, figured at 75 to 80% of the full cubic contents of Ice Chamber

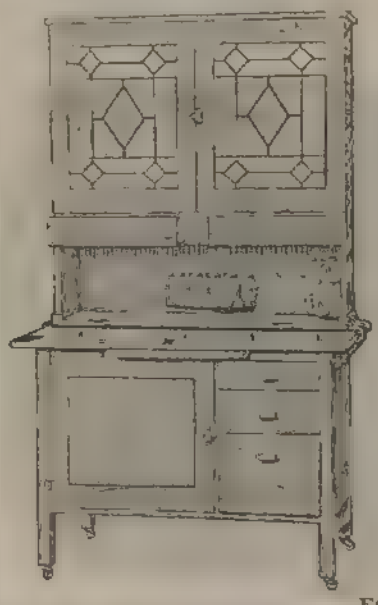
KITCHEN CABINETS OR FAMILY GROCERS

Factory Shipment Only

A necessity in every kitchen or household; economizes space, all articles under cover, away from dust, ants flies and germs. Flour, Sugar, Spices etc., are fully protected and handy to get at; many hundreds of steps will be saved the busy and tired housewife, each day, getting a cup, a bowl, knife, fork, spoon, beater, masher and the hundred other cooking necessaries.

Each

No. 137-93—Made of Hardwood, Light Golden Finish; Size of Top 26x42 in.; Height Over-all 70 in.; The top of this Cabinet has a large cupboard with two Shelves enclosed with art glass doors; One drawer on either side can be used for sugar and salt respectively; Two small Drawers in the center for Twine, Cutlery and other purposes; Below these two Drawers is a Hardwood Cutting Board for cutting meat, vegetables and bread; The Base has a large cupboard on one side, a flour bin holding 50 Lbs. of Flour on the other and a drawer for kitchen cutlery; Just below the top is a sliding Kneading Board 18x18 in.; This Cabinet is provided with Casters and is a very roomy, serviceable piece of kitchen furniture.....$24 00



Each

No. 84-94—Made of Hardwood, Light Golden Finish; Top consists of a large Cupboard with three Shelves enclosed with 3 ply figured gumwood panel top doors; Two large Drawers and a Metal Rack holding Five Air-Tight Spice Bottles and Glass Tea and Coffee Canisters. The Base has a sliding Metal Top, Size 38x40 in., Height Over-all 74 in.; In the lower right hand corner is a metal Bread Bin with a Sliding Cover; Above it are two Drawers for Kitchen Linen, Cutlery, etc.; The large Cupboard on the left is furnished with a sliding, metal shelf and tin rack on the door. Just below the metal top is a sliding Kneading Board 18x18 in.; Furnished with Casters.....$26.00

Each

No. 525-522—Made of Hardwood, Light Golden Finish; All Door Panels are made of Oak; The Top contains a tin Flour Bin with Sifter Attachment holding 40 Lbs. of Flour; A Cupboard on the right with two Shelves is enclosed with two Doors. The two Doors enclose the lower part of this top in which are held Five Air-Tight Spice Bottles, one glass Tea and Coffee Container and one large Sugar Bin with metal valve at the bottom; The Base of this Cabinet has a metal Sliding Top; Size extended 37x40 in.; A large Cupboard on the left has a sliding metal shelf and on the Door there is a rack for holding Tinware; On the right side are two Drawers for Kitchen Linen and Cutlery, and one large metal Bread Bin with Sliding Top; With Casters.$31 00

CABINET BASES

Each

No. 86—Made of Hardwood, Light Golden Finish; Size of Top 25x42 in.; In this Base are two large Flour Bins, two small Drawers and one Knead Bread 19x18 in.....$8.00

KITCHEN TABLES

Each

No. 225½—White Enamel Base, with Aluminum Top, Size 26x42 in.; 2 in. Legs $8.00
No. 15½—Size 28x42 in.; 2½ in. Legs 4.00
No. 15 —Same as above, without Drawer 3.70
No. 25½—Size 26x42 in.; 2 in. Legs.. 3.30
No. 25 —Same as above, without Drawers 3.00

Each

No. 89-86—Made of Hardwood, Light Golden Finish; Top 25x42 in.; Height 66 in.; Top has two Shelves enclosed with Art Glass Doors; Two small Drawers; The Base has two Flour Bins holding 50 Lbs. Each; Two small Drawers; one Knead Board 18x18 in.....$16.00

REMINGTON U. M. C. REPEATING RIFLES AND CARBINES

PUMP ACTION; TAKE DOWN; HAMMERLESS

MODEL 14A, STANDARD GRADE

Safety- Premature discharge is impossible; The Safety Lock is conveniently located immediately behind the Trigger; It is impossible to pull the Trigger when the Rifle is "on safe", Accuracy The Solid Breech Lock close up to the head of the Cartridge and the accurately bored and rifled Barrel give great exactness and regularity, It is impossible for the Cartridge to become stuck in the Chamber, Rapidity and Ease of Operation The Slide or Pump Action permits great rapidity of Fire The operation is extremely easy, Take-Down- Strong and Simple will not become loose under the hardest usage When taken down it can be carried in a suit case, By removing the Block a full view of the Bore and Chamber is obtained this allows the Barrel to be kept clean and well oiled; Spiral Magazine— The Cartridges are held end to end in such a manner that it is impossible for any bullet in the magazine to come in contact with the primer of the next cartridge ahead this insures absolute safety, Recoil Lock Prevents opening of the Breech until the cartridge in the Chamber is exploded Sights Low and smooth with no projecting parts, The Rear Buckhorn Sight is minutely adjustable The Front Sight is a Copper Bead dovetailed into the Solid Mid Lug which is a part of the Barrel The Sights lie very low on the Barrel.
American Walnut Stock, fitted with Shot Gun Style Rubber Butt Plate; 22 in. Ordnance Steel, Round Barrel.

Each	Each	Each
No. 14A25—25 Remington Caliber, 22 in. Round Steel Barrel; 6 Shots $35.00	No. 14A30—30 Remington Caliber, 22 in Round Steel Barrel; 6 Shots $35.00	No. 14A32—32 Remington Caliber, 22 in Round Steel Barrel, 6 Shots.$35.00 No 14A35—35 Remington Caliber, 22 in. Round Steel Barrel; 6 Shots. 35 00

Weight About 6½ Lbs. Each

MODEL 14R, SIX SHOT REPEATER

Length of Barrel 18½ in.; Steel Carbine Butt; Sights same as No. 14A, at Top of Page

Each	Each	Each
No. 14R25—25 Remington Caliber ..$34 00	No. 14R30—30 Remington Caliber ..$34 00	No. 14R32—32 Remington Caliber....$34.00 No. 14R35—35 Remington Caliber ... 34.00

Weight About 6 Lbs. Each

Remington-UMC AUTOLOADING RIFLES

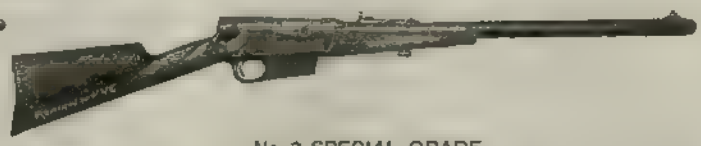
The Remington Autoloading is a 5 Shot, Take-Down, Hammerless Rifle, loading Automatically, and Handling High Power Rimless Sporting Cartridges. The mechanism is operated entirely by Recoil, utilizing it to Reload, consequently reducing the shock on the shoulder and permitting more pleasant, accurate and rapid shooting. When a cartridge has been fired, the recoil ejects the empty shell, raises a loaded one into the Chamber and makes the Rifle ready to fire again; the Pulling of Trigger only remains necessary. The Free Recoil of Barrel eliminates the tendency to "Whip" or "Switch" as is experienced with ordinary High Power Rifles. The Box Magazine takes Cartridges Singly or in Clips; A Trigger Lock allows the Rifle to be safely carried, Loaded; A Solid Breech prevents Gas, Grease or any such substance from blowing back in the eyes or face of shooter. A Turning Bolt Locks closely against the Head of Cartridge, reduces the liability of breaking Shells, also holds Breech securely, and absolutely assures the perfect safety of this Arm. All these combine in a fast shooting, hard hitting rifle of sufficiently large caliber for the Biggest Game, and one which is most perfectly balanced, an important feature and absolutely essential for accurate work.

All have 22 in. Round Steel Barrel, Fitted with Open Sporting Rear and Bead Front Sights; Fancy Engraved Receiver and Magazine, Walnut Forearm, Straight Grip, Shot Gun Butt Stock, Rubber Butt Plate; 3 Cartridge Clips supplied with Each Rifle.

No. 1 STANDARD GRADE

	Each
No. RA125—25 Autoloading Caliber, Center Fire	$45 00
No. RA130—30-30 Autoloading Caliber, Center Fire	45 00
No. RA132—32 Autoloading Caliber, Center Fire	45 00
No. RA135—35 Autoloading Caliber, Center Fire	45 00

Weight 7¼ Lbs. Each



No. 3 SPECIAL GRADE

Same as Standard Grade except Stock and Forearm are of selected Imported Walnut, neatly Checkered. Can furnish with Half-Pistol Grip to order, no extra charge.

	Each
*No. RA325—25 Autoloading Caliber	$55 00
*No. RA330—30-30 Autoloading Caliber	55 00
*No. RA332—32 Autoloading Caliber	55 00
*No. RA335—35 Autoloading Caliber	55 00

Weight 7¼ Lbs. Each

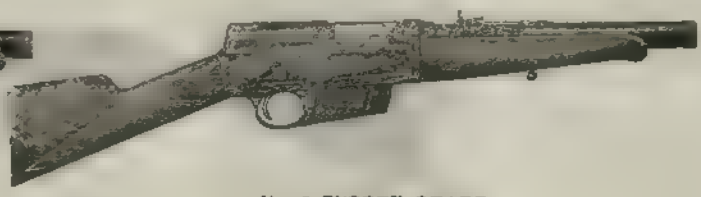
	Each
Extra Clips for above Rifles (Specify Caliber)	$0 15

No. 4 PEERLESS GRADE

High Grade Imported Walnut Stock and Forearm; Receiver and Barrel Jacket are finished with a rich Scroll Hand Engraving; All working parts are Hand Polished.

	Each
*No. RA425—25 Autoloading Caliber, Center Fire	$70 00
*No. RA430—30-30 Autoloading Caliber, Center Fire	70 00
*No. RA432—32 Autoloading Caliber, Center Fire	70 00
*No. RA435—35 Autoloading Caliber, Center Fire	70 00

Weight about 7¾ Lbs. Each

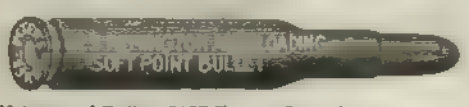


No. 5 EXPERT GRADE

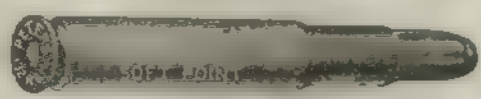
Selected High Grade Imported Walnut Stock and Forearm, handsomely Checkered; Silver Name Plate inlaid in stock; Receiver and Barrel Jacket are finished with beautiful deep Scroll Hand Engraving with a Game Panel on Left Side of Receiver; All working parts are hand polished.

	Each
*No. RA525—25 Autoloading Caliber, Center Fire	$100 00
*No. RA530—30-30 Autoloading Caliber, Center Fire	100 00
*No. RA532—32 Autoloading Caliber, Center Fire	100 00
*No. RA535—35 Autoloading Caliber, Center Fire	100 00

Weight about 7¾ Lbs. Each



Velocity of Bullet, 2127 Ft. per Second
Muzzle Energy of Bullet, 1175 Ft. Lbs
Bullet will Penetrate, 11—⅛ in. Pine Boards.



Velocity of Bullet, 2057 Ft. per Second.
Muzzle Energy of Bullet, 1650 Ft. Lbs.
Bullet will Penetrate, 12—⅛ in. Pine Boards.

Velocity of Bullet, 2020 Ft. per Second.
Muzzle Energy of Bullet, 1540 Ft. Lbs.
Bullet will Penetrate, 11—⅛ in. Pine Boards.

Velocity of Bullet, 2000 Ft. per Second.
Muzzle Energy of Bullet, 1776 Ft. Lbs.
Bullet will Penetrate, 12—⅛ in. Pine Boards.

*Not Carried in Stock. Can only be Furnished by Shipping Direct from Factory

For Special Sights see pages 2936-2937, Cleaning Rods 3030-3032, Ammunition 3008-3018 Component Parts 2970-2971

Remington-UMC REPEATING SHOT GUNS

12 GAUGE

The mechanical construction of all Remington Repeating Shot Guns is the same. They have an absolutely solid breech closed on top, loading and ejecting the shells is accomplished from the under side, with the advantage that ejected shells are kept away from the face of the shooter and from interfering with the aim. The solid breech insures absolute safety of the operator as there is no chance for bursted shells, gases or burnt powder flying back in the face or eyes. Breech block must always be forward in order to put the gun together.

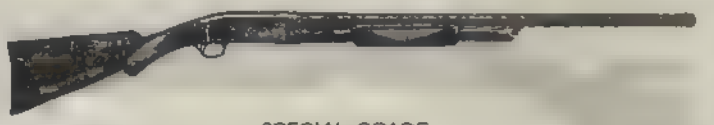
Pump Action, Take-Down, Solid Breech, Hammerless, Six Shots

STANDARD GRADE

Remington Steel Barrel, Blued Finish, Full Choke Bored; Walnut Half Pistol Grip, Stock and Fore-arm; Matted Rib on Receiver; Stock is 13¾ in. Long, 2¾ in Drop at Heel, 1⅝ in. Drop at Comb.

	Each
No. 10A—12 Gauge, 30 or 32 in. Barrel.	$40 00
No. 10AR 12 Gauge, 30 in. Barrel, with Raised Solid Matted Rib; Otherwise same as above	45 00

Weight 7¾ Lbs. Each



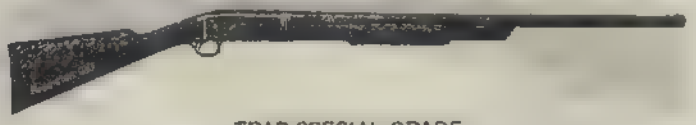
SPECIAL GRADE

Same as No. 1 Standard Grade with the exception that the Stock and Fore-arm are of Imported Walnut, and Half Pistol Grip and Fore-arm are neatly Checkered.

	Each
No. 10BR—12 Gauge, 30 or 32 in. Barrel with Raised Solid Matted Rib	$63 75
*No. 10B—12 Gauge, 30 in. Barrel.	57 00

Weight 7¾ Lbs. Each

Note—Will furnish above Gun made to order, without extra charge, with Stock from 13½ to 15 in. Long with from 2 to 3¼ in. Drop at Heel. Any other Length or Drop of Stock made to order at an advance of $10.00.

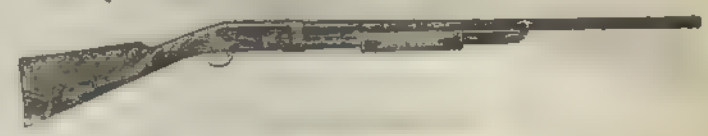


TRAP SPECIAL GRADE

Remington Steel Barrel, Blued Finish; Selected Walnut Straight Grip Stock with Full Comb Checkered Stock and Fore-arm, Rubber Butt Plate; Matted Rib on Receiver; Stock is 14 in. Long, 2 in. Drop at Heel, 1½ in. Drop at Comb. These dimensions have been found by the majority of Trap Shooters best adapted for Trap Shooting purposes; Top Surface of Barrel is neatly Matted its entire length, which prevents the reflection of ght that might interfere with the Shooter's sighting.

	Each
No. 10SR—12 Gauge, 30 or 32 in. Barrel with Raised Solid Matted Rib	$61 75
*No. 10S —12 Gauge, 30 in. Barrel.	55 00

Weight 7¾ Lbs. Each



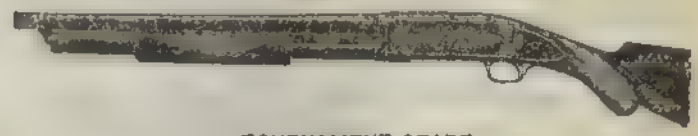
TRAP GRADE

Remington Steel Barrel, Blued Finish, Selected Walnut Straight Grip Stock with Full Comb, Checkered Stock and Fore-arm, Rubber Butt Plate; Matted Rib on Receiver, Barrel chambered for 2¾ in. Shells. Stock is 14 in. Long, 2 in. Drop at Heel, 1½ in. Drop at Comb

	Each
No. 10CR—12 Gauge, 30 or 32 in. Barrel with Raised Solid Matted Rib	$63.75
*No. 10C -12 Gauge, 30 in. Barrel.	57 00

Weight 7¾ Lbs. Each

Note—Will furnish above Gun made to order, without extra charge, with Stock from 13½ to 15 in. Long with from 2 to 3¼ in. Drop. Any other Length or Drop of Stock made to order at an advance of $10.00



TOURNAMENT GRADE

Remington Steel Barrel any desired Choke, Blued Finish; Receiver and Barrel are finished in a rich Scroll Hand Engraving; Stock and Fore-arm are of Selected Imported Walnut neatly finished by hand with attractive Checkering; Rubber Butt Plate; Pistol Grip Stock 13¾ in. Long, 2¾ in. Drop at Heel, 1⅝ in. Drop at Comb.

	Each
*No. 10D—12 Gauge, 30 or 32 in. Barrel.	$70 00
*No. 10DR—12 Gauge, 30 or 32 in. Barrel with Raised Solid Matted Rib; Otherwise same as above.	76.75

Weight 7¾ Lbs. Each

EXPERT GRADE

Remington Steel Barrel any desired Choke; Stock and Fore-arm are of choicest Imported Walnut handsomely Checkered by hand; Silver Name Plate inlaid in Stock; Barrel and Receiver are finished with a beautiful deep Scroll Hand Engraving with Panel on Left Side of Receiver. All working parts are Hand Polished. Stock Dimensions are same as No. 4 Tournament Grade.

	Each
*No. 10E—12 Gauge, 30 or 32 in. Barrel.	$100 00
*No. 10ER—12 Gauge, 30 or 32 in. Barrel with Raised Solid Matted Rib; Otherwise same as above.	107.75

Weight 7¾ Lbs. Each

Note—No. 4 and No. 5 Grades will be furnished made to order in any dimensions of stock desired without extra charge. When straight Grip is ordered on these Grades, Stock will be furnished 14 in. Long, 2 in. Drop at Heel and 1½ in. Drop at Comb, unless otherwise specified.

EXTRA BARRELS FOR REMINGTON REPEATING SHOT GUNS

	Each
Remington Steel, Complete with Barrel Yoke and Lug, for Standard, Special and Trap Grades	$21.00
Remington Steel, Complete with Barrel Yoke and Lug for Trap Special Grade	25 00
Remington Steel, Complete with Barrel Yoke and Lug for Tournament Grade	30.00

In all cases extra barrels will have to be fitted at the factory as they are not interchangeable Must send complete gun

*Not Carried in Stock. Can only be Furnished by Shipping Direct from Factory.

Special Catalog will be sent on request describing in detail each of above Guns.

For List of Component Parts for above Guns, see page 2952

Remington-UMC AUTOLOADING SHOT GUNS

This Gun is a Take Down, Hammerless, Autoloading, Single Trigger Repeater. The act of pulling the Trigger fires the Gun and the Recoil is used to operate the Mechanism. In consequence of this Recoil being utilized, the shooter is spared the discomfort and disturbance of aim from the kick. After a shot has been fired the Recoil opens the Breech, ejects the empty casing, inserts a new Shell, cocks the Hammer, closes and locks the Breech and makes the Gun ready to fire again. The top and back of Breech being solid, make it impossible for Gas, Grease, Bursted Head of Shell or anything else to fly back into the eyes or face of the shooter

REMINGTON STEEL BARRELS, SOLID BREECH, TAKE-DOWN, MATTED RECEIVER, RUBBER BUTT PLATE; CHAMBERED FOR SHELLS UP TO 2¾ IN., 12 GAUGE, FIVE SHOTS

STANDARD GRADE

Half Pistol Grip Stock of American Walnut; Full Choke Bored Barrel.

Each

No. 11A—12 Gauge, 28 in. Barrel.....$50 00
No. 11AR—Above Gun fitted with Raised Solid Matted Rib 56 75
Weight 7¾ Lbs. Each

SPECIAL GRADE

Same as No. 1 Standard Grade with the exception that the Stock and Fore-arm are of Selected Imported Walnut and Half Pistol Grip and Fore-arm are neatly Checkered.

Each

No. 11BR—12 Gauge, 28 in. Barrel with Raised Solid Matted Rib $65.00
Weight 7¾ Lbs. Each

Note—Regular dimensions of Stock of above Guns 14 in. Long, 2½ in. Drop at Heel and 1⅝ in. Drop at Comb. Any other length or drop of stock made to order at an advance of $10.00

TRAP GRADE

Especially designed for the Trap Shooter; Selected English Walnut Stock, Straight Grip and Fore-arm; Neatly Checkered; Full Choke Bored.

Each

No. 11CR—12 Gauge, 28 in. Barrel; with Raised Solid Matted Rib $65 00
Weight 7¼ Lbs. Each

Note—Regular dimensions of Stock of above Gun 14¼ in. Long, 2¼ in. Drop at Heel and 1⅝ in. Drop at Comb, any other Length or Drop of Stock made to order at an advance of $10.00.

RIOT MODEL

For Express Messengers and Guards, Bank or Home Protection, Riots, etc.; Use Buck Shot Load; Cylinder Bored, Walnut Fore-arm and Stock, Half Pistol Grip.

Each

†No. 11R—12 Gauge, 20 in. Barrel.....$50 00
Weight 7½ Lbs. Each

TOURNAMENT GRADE

Barrel any desired Choke; Selected English Walnut Stock and Fore-arm delicately Hand Checkered; Receiver and Barrel finished with a Rich Scroll Hand Engraving; all working parts are Hand Polished, Half Pistol Grip Stock 14 in. Long, 2½ in. Drop at Heel, and 1⅝ in. Drop at Comb (See note under No. 6 Premier Grade.)

Each

†No. 11D—12 Gauge, 26 or 28 in. Barrel.....$80 00
Weight 7¾ Lbs. Each

EXPERT GRADE

Barrel any desired Choke; Choicest Imported Walnut Stock and Fore-arm, handsomely Checkered; Silver Name-Plate inlaid in stock; Barrel and Receiver are finished with beautiful Deep Scroll Engraving with Game Panel on Left Side of Receiver; all working parts are Hand Polished; Stock dimensions same as No. 4 Tournament Grade.

Each

†No. 14E—12 Gauge, 26 or 28 in. Barrel.....$110.00
Weight 7¾ Lbs. Each

PREMIER GRADE

Barrel any desired Choke; Finest Circassian Walnut Stock and Fore-arm, inlaid with Gold Name Plate, and delicately Checkered; Engraving on this Grade is a work of art; Game Panels are surrounded with Deeply Shaded Scroll and Border Engraving which brings out Game in Relief; Owner's initials engraved on Name Plate if so desired; Stock dimensions, same as No. 4 Tournament Grade.

Each

†No. 14F—12 Gauge, 26 or 28 in. Barrel.....$160 00
Weight 7¾ Lbs. Each

Note—No. 4, No. 5 and No. 6 Grade Guns shown above can be furnished, made to order, in any dimension of stock desired without extra charge. When Straight Grip is ordered on these grades, Stock will be furnished 14¼ in. Long, 2¼ in. Drop at Heel and 1⅝ in. Drop at Comb, unless otherwise specified.

Note—Can furnish any of above Guns for shipment from factory fitted with Raised Solid Matted Rib at an advance of $6 75 list, or with a Ventilated Matted Rib at an advance of $13.00 list.

EXTRA BARRELS FOR REMINGTON AUTOLOADING SHOT GUNS

	Each
Fitted, Choke or Cylinder Bored for Standard, Special and Trap Grades	$21.00
Fitted, Choke or Cylinder Bored for Tournament Grade	25 00
Fitted, Choke or Cylinder Bored for Expert Grade	30 00
Fitted, Choke or Cylinder Bored for Premier Grade	35 00

In all cases extra barrels will have to be fitted at the factory as they are not interchangeable. Must send Complete Gun.
†Not Carried in Stock. Can only be Furnished by Shipping Direct from Factory.
For Component Parts see page 2951

RESTAURANT, SODA FOUNTAIN AND STORE STOOLS

Note—Specify Oak or Mahogany Seat, Height and Finish of Base

No. 401P—WITHOUT METAL RING

Oak or Mahogany Seat

Height, In.	21	25	30
Weight Each, Lbs.	9	9½	10½
Japanned Trim, Each	$1 46	1.50	1.60
Old Copper Trim, Each	2 04	2 06	2.10
Nickel Trim, Each	2 08	2.10	2.14

No. 401R—WITH NICKEL RING

Oak or Mahogany Seat

Height, In.	21	25	30
Weight Each, Lbs.	11	11½	12½
Japanned Trim, Each	$1 96	2 00	2 10
Old Copper Trim Each	2 54	2 56	2 60
Nickel Trim, Each	2.56	2 60	2 64

No. 405P—WITHOUT METAL RING

Oak or Mahogany Seat

Height, In.	21	25	30
Weight Each, Lbs.	19	21	23
Japanned Trim, Each	$2.02	2.16	2 38
Old Copper Trim, Each	2.76	3 00	3.54
Nickel Trim, Each	3.23	3 62	3 82

No. 405R—WITH NICKEL RING

Oak or Mahogany Seat

Height, In.	21	25	30
Weight Each, Lbs.	21		24
Japanned Trim, Each	$2.52	2 66	2.88
Old Copper Trim, Each	3 26	3 50	4.01
Nickel Trim, Each.	3 73	4 12	4 32

No. 403P—WITHOUT METAL RING

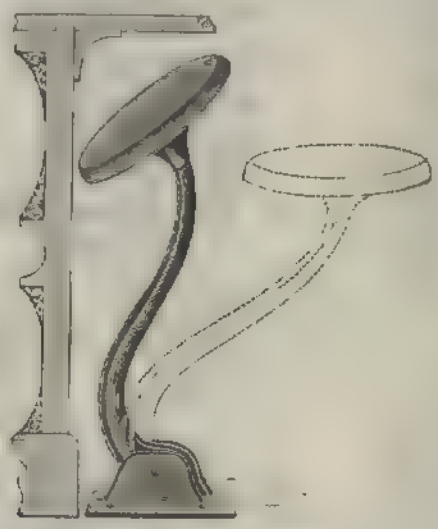
Oak or Mahogany Seat

Height, In.	21	25	30
Weight Each, Lbs.	16	17	21
Japanned Trim, Each	$1 76	1 92	2.42
Old Copper Trim Each	2 44	2 58	3.46
Nickel Trim, Each	3.08	3 90	4.44

No. 403R—WITH NICKEL RING

Oak or Mahogany Seat

Height, In.	21	25	30
Weight Each, Lbs.	18	19	23
Japanned Trim, Each	$2 26	2.42	2.92
Old Copper Trim, Each	2.94	3 08	3.96
Nickel Trim, Each	3.58	4.40	4 94



No. 407—FOR ELEVATORS AND COUNTERS

Oak or Mahogany Seat; No Ring

Stool folds up against Counter when weight of person is removed; Japanned, Wood Top

Height, In.	22¼	25	30
Weight Each, Lbs.	17	18	19
Japanned Trim, Each	$2 00	2.12	2 36
Nickel Trim, Each	2.80	2.92	3.56

No. 408P—WITHOUT RING

Oak or Mahogany Seat

Height, In.	27	30
Weight Each, Lbs.	14	15
Japanned Trim, Each	$1 76	1.80
Old Copper Trim, Each	2 38	2.40
Nickel Trim, Each	2 42	2.44

No. 408R—WITH NICKEL RING

Oak or Mahogany Seat

Height, In.	27	30
Weight Each, Lbs.	16	17
Japanned Trim, Each	$2.26	2.30
Old Copper Trim, Each	2.88	2.90
Nickel Trim, Each	2.92	2.94

No. 853-403—GOLDEN OAK SADDLE, VENEER SEAT

Height, In.	21	25	30
Weight Each, Lbs.	26	27	29
Japanned Trim, Each	$7 54	7.78	8.00
Old Copper Trim, Each	8 38	8.62	8 96
Nickel Trim, Each	8.52	8 88	9.68

FILING CABINETS AND CARD SYSTEMS

CARD INDEX OUTFITS

WITHOUT COVER

Convenient for Desk Use; Holds any standard Cards. Each equipped with a 20 division A to Z Index and 100 Record Ruled Cards.

Golden Oak

	Each
No. 335DX—Holds 150, 3x5 in. Cards.	$0.65
No. 446DX—Holds 200, 4x6 in. Cards.	1.00
No. 558DX—Holds 400, 5x8 in. Cards.	2.00

Birch Mahogany

	Each
No. 335BX—Holds 150, 3x5 in. Cards.	$0.70
No. 446BX—Holds 200, 4x6 in. Cards.	1.10
No. 558BX—Holds 400, 5x8 in. Cards.	2.10

Shipping Weight—Size 3x5 in., 2⅛ Lbs.; 4x6 in., 4¾ Lbs.; 5x8 in., 9 Lbs. Each

WITH COVER

Holds any standard Cards; Each equipped with a 20 Division A to Z Index and 100 Record Ruled Cards.

Golden Oak

	Each
No. 533DX -Holds 150, 3x5 in. Cards..	$0 95
No. 644DX—Holds 200, 4x6 in. Cards	1 45
No. 855DX—Holds 400, 5x8 in. Cards..	2 25

Birch Mahogany

	Each
No. 533BX—Holds 150, 3x5 in. Cards	$1 00
No. 644BX —Holds 200, 4x6 in. Cards..	1 50
No. 855BX—Holds 400, 5x8 in. Cards.	2 35

Shipping Weight—Size 3x5 in., 3 Lbs.; 4x6 in., 5 Lbs.; 5x8 in., 9 Lbs. Each

WITHOUT COVER

With Follow Block and with Rubber Feet to prevent Scratching Desk; No. 935 is equipped with 25 Division A to Z Index; No. 946 and No. 958 are equipped with 25 Division Alphabetical Guide Cards; 9 in Long

Golden Oak Finish

	Each
No. 935DX—Holds 800, 3x5 in. Cards..	$1.00
No. 946DX—Holds 800, 4x6 in. Cards..	1.30
No. 958DX -Holds 800, 5x8 in. Cards..	1.80

Shipping Weight—4x5 in., 1¾ Lbs.; 4x6 in., 2⅝ Lbs.; 5x8 in., 3⅝ Lbs.

CARD INDEX TRAYS

With Follow Block and with Rubber Feet to prevent scratching Desk, No. 1335 is equipped with 20 Division, A to Z Index, 12 Monthly and 31 Daily Guide Cards; No 1346 and 1358 are equipped with 40 Division Alphabetical Guide Cards; with Removable Covers; 13 in. Long

Golden Oak Finish

No. 1335DX—Holds 1200, 3x5 in. Cards.	$2.30
No. 1346DX—Holds 1200, 4x6 in. Cards.	2.75
No. 1358DX -Holds 1200, 5x8 in. Cards.	3.70

Weights—3x5 in., 3 Lbs., 4x6 in., 4 Lbs., 5x8 in., 5½ Lbs Each

Made of Heavy Tough Fiber Board, reinforced with strong Binders' Cloth, covered with Imported Agate Paper; Ends of Tray made of Wood; No. 340G1 is equipped with 20 Division A to Z, 12 Monthly and 31 Daily Guide Cards; No. 340G2 and No. 340G3 are equipped with 40 Division Alphabetical Guide Cards; with Removable Cover; 11 inches Long.

	Each
No. 35—Holds 1200, 3x5 in. Cards....	$0 90
No. 46—Holds 1200, 4x6 in. Cards....	1.20
No. 58—Holds 1200, 5x8 in. Cards....	1.70

Weight—3x5 in., 1½ Lbs.; 4x6 in., 2¼ Lbs.; 5x8 in., 3 Lbs. Each

TRANSFER CASES

FIBER BOARD

Made of Heavy Fiber Board, re-enforced with strong Binder's Cloth at Corners, Covered with Imported Agate Paper; Each Case will accommodate the entire contents of one of the vertical File Drawers.

	Each
No. 920—Size 20 in. Deep, 12½ in. Wide, 10¼ in. High.....	$1.10

Shipped Knocked Down
Shipping Weight, 6 Lbs. per Dozen

VERTICAL LETTER FILES

FIBER BOARD

Files are made of Heavy Tough Fiber Board, re-inforced with strong Binders' Cloth, covered with Imported Agate Paper; Complete with 25 Division A to Z Guide Cards and Adjustable Follow Block.

	Each
No. 225—Size, Set up 10½ in. High, 12 in. Wide, 11½ in. Long; Knocked Down 11½x12x2 in.....	$1.80

Weight 5 Lbs. Each

VERTICAL FILE FOLDERS

Made of Strong Manila Paper, Folded V Shaped, May be Lettered as desired. Convenient for Filing Letters, Vouchers, etc; Medium Weight.

	Per 1000
No. 8003—Letter Size	$10.00
Weight 50 Lbs. per M	
No. 8013—Legal Cap Size. . .	14.00
Weight 60 Lbs. per M	
No. 7003—Invoice Size	8.00
Weight 30 Lbs. per M	

Wrapped 100 Per Package

PLAIN AND RULED CARDS

For Card Indexes

	Price per 1000		
No. 340M —Blank	$1.85	3.10	5.00
No. 340M1—Record Ruled.	2.10	3.50	5.60
No. 340M2—Standard Ruled	2.10	3.50	5 60
No. 340M3—Price Ruled...	2.10	3.50	5 60
No. 340M4—Journal Ruled	2.10	3.50	5.60
No. 340M5—Ledger Ruled.	2.10	3.50	5 60
.....	2.10	3.50	....
No. 340M6—Double Vertical Ruled	1.70	2.90	

Put up in Boxes of 500 Each

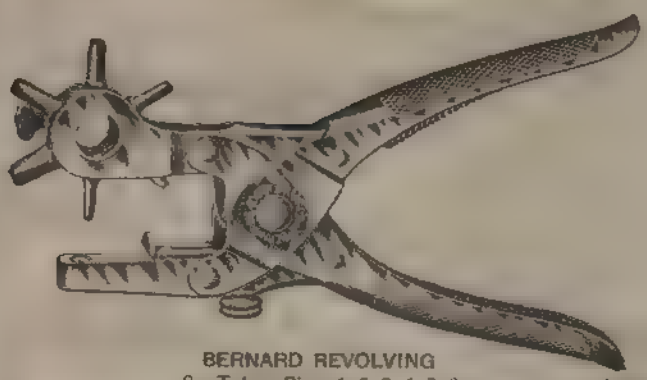
GUIDE CARDS

Made of High Grade Index Board
No. 340N, Marked Days; No. 340N1, Marked Months; Nos. 340N2 to 340N7, Marked Alphabetically; No. 340N8, Blank

Nos.	No. in Set	Price per Set 3x5 in.	4x6 in.	5x8 in.
340N	31	$0.35	$0.45	$0.55
340N1	12	.16	.18	20
340N2	10	.15	.20	25
340N3	20	.17	.25	30
340N4	25	.20	.30	.35
340N5	40	.50	.55	.65
340N6	80	.90	1.15	1.30
340N7	120	1.75	2.30	2.15
340N8 1000		5.00	7.00	9.00

When Ordering be sure to state Size

SADDLERS' PUNCHES



BERNARD REVOLVING

Six Tubes, Sizes 1, 2, 3, 4, 5, 6	Each
No. 60—Length 8 in., Best Quality Steel, Nickel Plated, Open Throat, Parallel Jaws, Mulled Handles; Tubes Screwed to the Hub. Adjustable Gauge enables user to punch the Holes at Uniform Distances, also used as a Belt Punch	$2.30

One in a Box; Weight 13½ Lbs. per Dozen

No. 155—OSBORNE SIDE SPRING, REVOLVING

Length 9 in.; Polished Steel; Tubes Screw to Hub	Each
Four Tubes, Sizes 1, 2, 3, 4	$2.30
Six Tubes, Sizes 1, 2, 3, 4, 5, 6	2.70

Half Dozen in a Box, Weight 11 Lbs. per Dozen

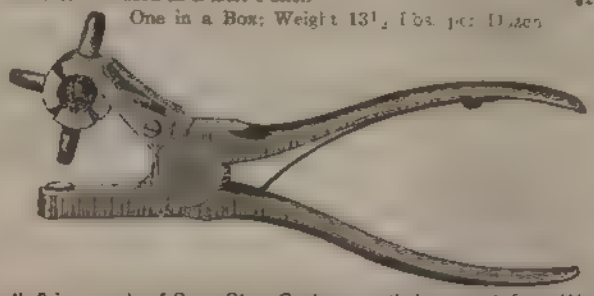
EXTRA TUBES	Each
For 155, Sizes 1 to 6	$0.30

No. 153—OSBORNE SINGLE TUBE

Length 8½ in., Extra Quality Steel, Polished, Tubes to Screw	Each
With One Tube, Size 1, 2, 3, 4, 5, 6, 7 or 8	$1.40
With One Tube, Size 00 or 0	1.50

Half Dozen in a Box, Weight 9¼ Lbs. per Dozen

EXTRA TUBES	Each
For No. 153, Sizes 1 to 8	$0.32
For No. 153, Sizes 00 or 0	.56



Length 9 in., made of Semi-Steel Castings, with Improved, Easy Working Joints. Tubes are made from Solid Stock, Tempered by Hand, Highly Tempered Steel Spring

SPRING, REVOLVING

Has Four Tubes, Assorted, Sizes 4, 6, 8 and 10. Turrets made from Solid Steel Rod

	Per Dozen
No. 384—Polished	$15.00

Half Dozen in a Box; Weight 10 Lbs. per Dozen

SPRING, SINGLE TUBE

Tubes are Easily Inserted or Removed

	Per Dozen
No. 228—Polished, with 4 Tubes, Sizes 6, 7, 8 or 9, Assorted in a Box	$5.00

One Dozen in a Box; Weight 8½ Lbs. per Dozen

EXTRA TUBES FOR ABOVE PUNCHES; Solid Stock, Tempered by Hand, Straw Color Finish; to Drive

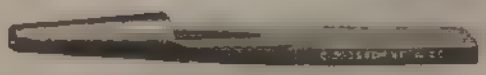
	Per Dozen
No. 360—For Revolving Punch, Assorted Sizes 4, 6, 8 and 10	$1.50
No. 220—For Spring Punch, Assorted Sizes, 3, 4, 5, 6, 7, 8 and 9	$1.50

No. 158—OVAL PUNCHES

Length 3¾ in.; Polished Steel; for Punching Holes for Trace Buckles, etc.

Size Nos	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Size Hole, In	1/16x1/8	1/16x3/16	1/16x1/4	1/16x5/16	1/16x3/8	1/16x7/16	1/16x1/2	1/16x9/16	1/16x5/8	1/16x11/16	1/16x3/4	1/16x13/16	1/16x7/8	1/16x15/16	1/16x1	1/16x1 1/16	1/16x1 1/8
Each	$0.70	.60	.60	.60	.60	.60	.60	.70	.70	.70	.70	.82	.82	.94	.94	.94	.94

One Dozen in a Box; Average Weight 1½ Lbs. per Dozen



No. 147—ROUND PUNCHES

Length 3¾ in., Polished Steel, for Straight Punching

Size Nos	0	1	2	3	4	5	6	7	8
Size, In.	1/16	3/32	1/8	5/32	3/16	7/32	1/4	9/32	5/16
Each	$0.50	.40	.40	.40	.40	.40	.40	.44	.44

Size Nos	9	10	11	12	13	14	15	16
Size, In.	3/8	7/16	1/2	9/16	5/8	11/16	3/4	13/16
Each	$0.44	.44	.50	.50	.68	.68	.82	.82

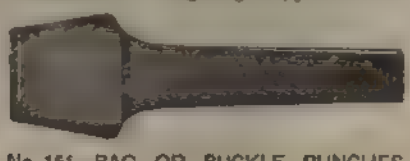
One Dozen in a Box; Weight 1¾ Lbs. Dozen

No. 150—STRAP END PUNCHES

Length 4½ in., Polished Steel, for Rounding Ends of Straps

Size, In.	¼	3/8	½	5/8	¾	1	1⅛	1¼	1½
Each	$1.30	1.30	1.30	1.30	1.30	1.30	1.50	1.50	1.50

One Dozen in a Box; Average Weight 1¾ Lbs. per Dozen

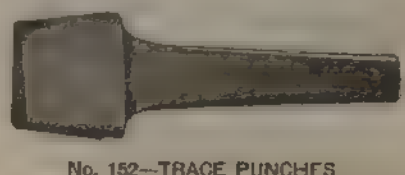


No. 151—BAG OR BUCKLE PUNCHES

Length 5 in.; Polished Steel; for Punching Buckle Holes

Size, In.	¼	3/8	½	5/8	¾	7/8	1	1⅛	1¼	1½
Each	$1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.80	1.80	1.80

Average Weight 5 Lbs. per Dozen



No. 152—TRACE PUNCHES

Half Dozen in a Box

Length 5 in., Polished Steel, for Punching Holes in Ends of Traces

Size, In.	⅝	¾	⅞	1	1⅛	1¼	1½
Each	$1.80	1.80	1.80	1.80	1.80	1.80	1.80

Average Weight 4 Lbs per Dozen

OSBORNE PLIERS

BOLT NUT

Very Handy in Removing any sized Nut on Gig Saddles

	Each
No. 102½—Length 6½ in. Polished Steel, Heavy Rivet	$2.00

Weight 5 Lbs. per Dozen

SADDLERS' PINCERS

For Pulling Leather into place and Tacking it down

	Each
No. 104—Length 8 in., Polished Nickel Hardened Jaws	$2.30

Weight 15 Lbs. per Dozen

Half Dozen in a Box

PINCER PLIERS

Polished Steel

For Pulling Leather, Removing Brads, etc., A Very Handy Tool for General Use

No. 99—HARNESS MAKERS'		
Length, In.	6	7
Weight per Dozen, Lbs.	6	6½
Each	$1.30	1.40

No. 98—SADDLERS'			
Length, In.	5	6	7
Weight per Dozen, Lbs.	5½	6	6½
Each	$0.76	.84	1.00

Half Dozen in a Box

PAD SCREW PLIERS

Length over all 6¼ in., Forged Steel

	Each
No. 102N—Nickel Plated	$2.40
No. 102B—Black Finished Handles	1.90

Open Stock; Weight 5 Lbs. per Dozen

OSBORNE CUTTING NIPPERS

Used not only by Harness Makers but by all classes of Mechanics, Farmers, etc., for Cutting Rivets, Wire, etc

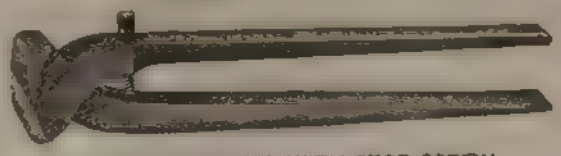
For other Cutting Nippers, see Tool Dept. Page

No. 94—EXTRA QUALITY

Steel Handles, Hardened Steel Jaws; Polished

Length, In.	5	6
Weight per Dozen, Lbs.	11	12
Each	$1.90	2.50

Half Dozen in a Box

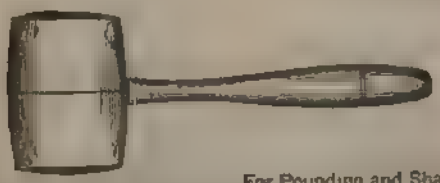


No. 96—EXTRA HEAVY, WITH STOP SCREW

Length, In.	7	8	9
Weight per Dozen, Lbs.	12	15	24
Each	$3.50	4.00	4.60

Quarter Dozen in a Box

OSBORNE MALLETS



For Pounding and Shaping the Leather, and Hammering Dies, Tools, etc.

No. 89—LIGNUM VITAE; Hickory Handle

Also Used by Carpenters, Tinners, etc.

Diam. of Face, In.	2½	3
Weight Each, Lbs.	1¼	1¾
Each	$0.90	1.00

No. 165½—RAWHIDE

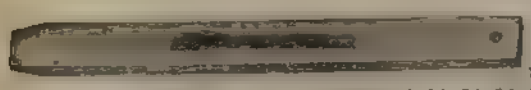
Hydraulic Pressed; Elastic and Durable; Filled with Selected Stock

Size Nos.	0	1	2	3	4	5
Diam. of Head, In.	3⅛	3¼	3½	4	4½	4⅝
Weight each, Lbs.	2	3	4	6	8	10
Each	$3.00	3.40	4.10	4.50	5.00	5.70

Open Stock

LOOP STICKS

For Blocking up Leather Loops, Preparing them for the Strap



HICKORY

Smoothly Finished, Length 13 in.

Set No. 10S—Straight, Assorted Widths, ⅛, ⅛, ⅝, ¾, ⅞, 1, 1⅛, 1¼, 1⅜ and 1½ in. . . . Per Set of Ten, $1.20

Set No. 10T—Taper, Assorted Widths, ¾, 1, 1¼, 1¼, 1⅜ and 1½ in. . . . Per Set of Ten, $1.00

One Set in a Bundle; Weight 1½ Lbs. per Set

IRON

Made to Exact Sizes; Highly Polished, 12 in. Long

No. 11S—STRAIGHT

Size, In.	⅜	½	⅝	¾	⅞	1	1⅛	1¼	1⅜	1½	1⅝	1¾
Weight, Each, Lbs.	¼	¼	⅜	⅜	½	½	¾	⅞	1	1¼	1½	1¾
Each	$0.30	.38	.38	.46	.46	.60	.60	.76	.75	.84	.90	1.00

No. 11T—TAPER

Size, In.	¾	½	⅝	¾	⅞	1	1⅛	1¼	1⅜	1½	1⅝	1¾
Weight, Each, Lbs.	¼	¼	⅜	⅜	½	½	¾	1	1¼	1½	2	2½
Each	$1.50	1.50	1.70	1.70	1.86	1.86	2.20	2.20	2.30	2.30	2.50	2.50

Open Stock

SAMPLE HOLDERS

Samples are easily removed and changed, to prevent loss by Rust, Dust or Tarnish

Made of Spring Steel, nicely Nickel Plated

Per Gro.
No. 1—For Nail Sets, Gimlet Bits, Awls, Needles, Calipers, etc. $12.00

Per Gro.
No. 2—For Scissors, Keys, etc. $12.00

Per Gro.
No. 3—For Hammers, Hatchets, Handles, etc. $12.00

Per Gro.
No. 4—For Nearly all Shelf Hardware.$12.00

Per Gro
No. 7—For Nail and Rivet Sets, Punches, Bits, etc....$12.00

Per Gro.
No. 5—For Locks, Barrel Bolts, Hand Saws, Axes, etc. $12.00

Per Gro
No. 6—For Knobs, Braces, Wrenches and Goods with 1 to 2 in. Offset..$12.00

Per Gro.
No. 0—For Anything in Pairs, such as Knives and Forks, Table and Tea Spoons, etc.....$12.00

Per Gross
No. 8—For Pocket Knives, Razors, etc.; Slip Holder in at Side of Blade. Out of Sight and Holds Knife or Razor Securely $12.00

Per Gross
No. 10—For Scythes, Axe and Sledge Handles, Bats and Goods 1 to 2 in. in Diameter $24.00

ASSORTMENT

Per Gross
Nos. 0 to 8—Assorted for Goods as Listed Above, Complete with ⅛ in. No. 5 Screws $12.00

All Above, Straight Sizes and Assortments, Half Gross in a Box; We do not Break Boxes

CARD AND LABEL HOLDERS AND PULLS

Wrought Bronze, Buffed and Lacquered

For Wood and Paper Shelf Boxes, Cases, Cabinets, Desks, Shelving, etc.; Calling Cards on Doors of Apartments, etc.

Label Holders

Per Dozen
No. 321P—Size 1¼x2⅝ in., for ⅞x1½ in. Card $0.35

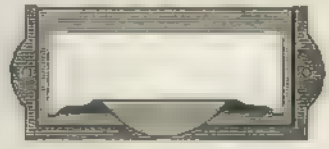
Per Dozen
No. 321S—Size 1¼x3 in., for 1x2⅞ in. Card $0.65

Per Dozen
No. 321W—Size 1½x3¼ in., for 1¼x2⅞ in. Card $0.80

Label Holders with Pull

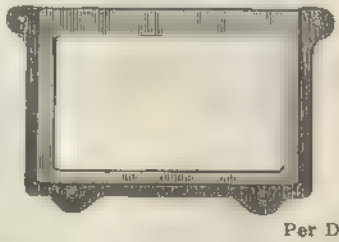
Per Dozen
No. 321R—Size 1¼x2⅝ in., for ⅞x1½ in Card $0.45

Per Dozen
No. 321T—Size 1¼x3 in., for 1x2⅞ in. Card $0.80



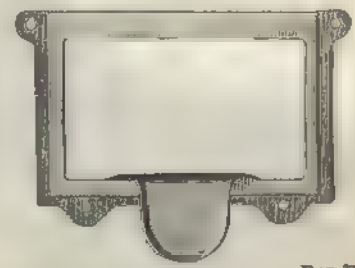
Per Dozen
No. 321X—Size 1½x3¼ in., for 1¼x2⅞ in Card $0.90

Label Holders



Per Dozen
No. 321V—Size 2¼x3⅝ in., for 2⅛x3 in. Card $1.20

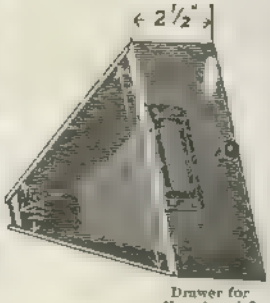
Label Holders with Pull



Per Dozen
No. 321Y—Size 2¼x3⅝ in., for 2⅛x3 in. Card $1.50

All Label Holders and Pulls, Three Dozen in a Box, without Screws or Pins

NAIL BINS



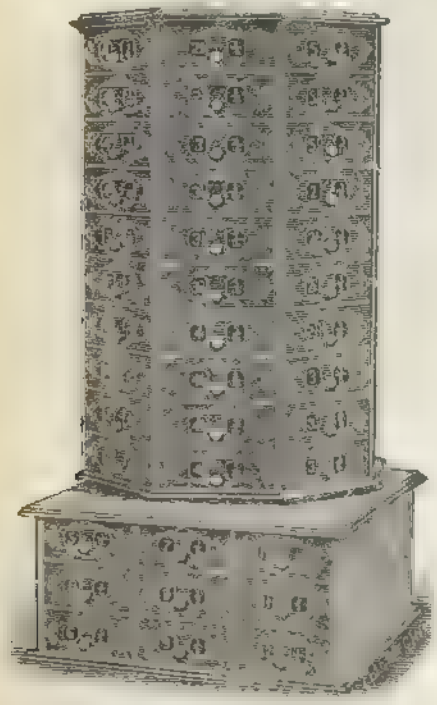
Drawer for Nos. 1 and 2

REVOLVING NAIL BINS
F. O. B. Wellston, Ohio

Wings in front of each Compartment prevent the Nails from mixing; Each Compartment will hold about 140 Lbs. of Nails; Can be used to hold Rivets, Screws, Washers, etc., and other small articles of Hardware; Cast Iron, Black Finish.

Nos.	Sections	Compartments	Weight	Each
23	3	15	250	$70 00
24	4	20	300	82 00
25	5	25	350	95 00

Open Stock
If Scale is Wanted, $12.00 Extra



AMERICAN REVOLVING BOLT CASES
F. O. B. Dayton, Ohio

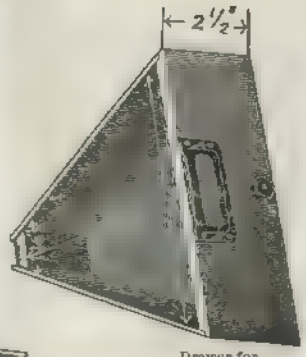
The Drawers are all provided with Stops to prevent their removal from the Case. Each Drawers holds a package of Bolts or Screws of the Size and Number indicated on the Front of the Drawers. Numbers on Bolt and Screw Cases will be changed, to suit Purchasers, without extra charge.

Each

No. 1R—60 in. High, 30 in. Wide, **98 Drawers**, 3½ in. Deep, 8⅝ in. Wide at Front, 7¾ in. Long; Weight 300 Lbs. $65.30

No. 2R—65 in. High, 30 in. Wide, **104 Drawers**, 3½ in. Deep, 8⅝ in. Wide at Front, 7¾ in. Long; Weight 325 Lbs. 71.30

SCREW AND BOLT CASES



Drawer for Nos. 3 and 4

AMERICAN REVOLVING SCREW CASES
F. O. B. Dayton, Ohio

Iron standards, screwed firmly into an iron hub in the bottom, hold the case solid. The tops and bottoms are double, with the grain of the wood crossed, glued and screwed together; braced with iron rods strong enough to bear three times the weight that can be put into them, and revolving perfectly true and easily. Both Bolt and Screw Cases are made of the best seasoned Tennessee Poplar, finished in imitation of Cherry. Special Cases of Oak, Mahogany, etc., furnished to order. The fronts of Drawers are made of the best Norway Pine, with the sizes which they contain nicely printed on.

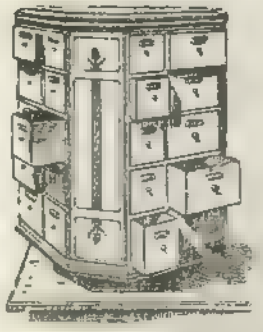
Each

No. 1—33 in. High, 21 in. Wide, 72 Drawers, 2½ in. Deep, 6¼ in. Wide at Front, 5⅝ in. Long; Weight 100 Lbs. $33.00

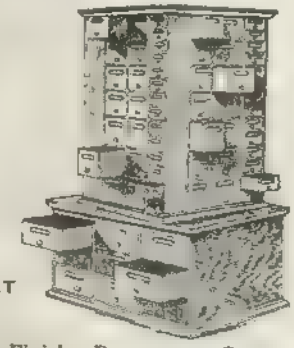
No. 2—36 in. High, 21 in. Wide, 80 Drawers, 2½ in. Deep, 6¼ in. Wide at Front, 5⅝ in. Long; Weight 100 Lbs. 37 50

No. 3—39 in. High, 24 in. Wide, 88 Drawers, 2½ in. Deep, 7¾ in. Wide at Front, 6⅝ in. Long; Weight 125 Lbs. 42.50

No. 4—42 in. High, 25 in. Wide, 96 Drawers, 2½ in. Deep, 7¾ in. Wide at Front, 6⅝ in. Long; Weight 125 Lbs. 46.00



Cross Section, No Space Wasted



BROWN PERFECTION BOLT AND SCREW CASES
F. O. B. Erwin, Tenn.

Made of Good Quality Tennessee Oak with Hard Oil Finish. Drawers are Square and hold more and longer bolts than cases of similar size with triangular Drawers; no waste space in center as the Drawers completely fill Case; the Revolving Feature is of the simplest possible construction and always works easily; it is neat in appearance, strongly made and will last a life time; each Drawer holds a package of Bolts or Screws of the Size and Number indicated on the Front of the Drawers; The Labels can be easily changed to suit any selection of Bolts and Screws.

BOLT CASES

Each

No. 40—40 Drawers, Diam. of Case 22 in., Height 37 in.; Wt. 180 Lbs. .. $27 00

SCREW CASES

No. 80—80 Drawers; Diam of Case 22 in, Height 37 in.; Wt. 180 Lbs. .. 36.00

No. 168—168 Drawers; Case 24 in Square, 50 in High; Weight 300 Lbs. Each 67.00

No. 200—200 Drawers; Case in Two Parts as shown on the Right Side; Revolving Top 24 in. Square, 50 in. High; Base 30 in. Square, 20 in. High; Weight 480 Lbs. Each 85.00

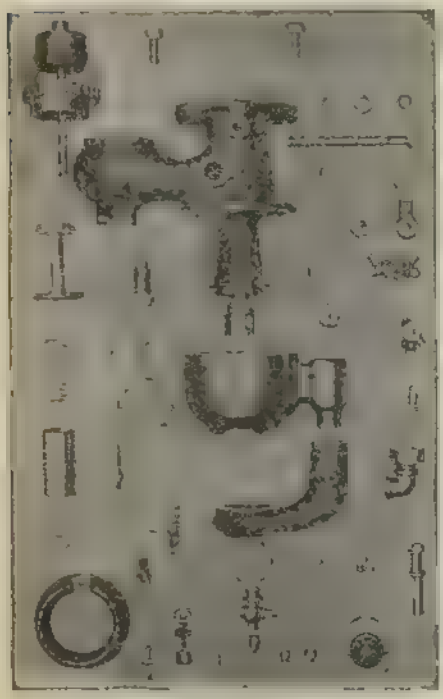
COMBINATION BOLT AND SCREW CASES

Each

No. 112—Upper Case Only, without the Base; Has 112 Drawers—56 for Bolts and Washers, 56 for Screws; Case 24 in. Square, 50 in. High .. $54.00
Weight 300 Lbs. Each

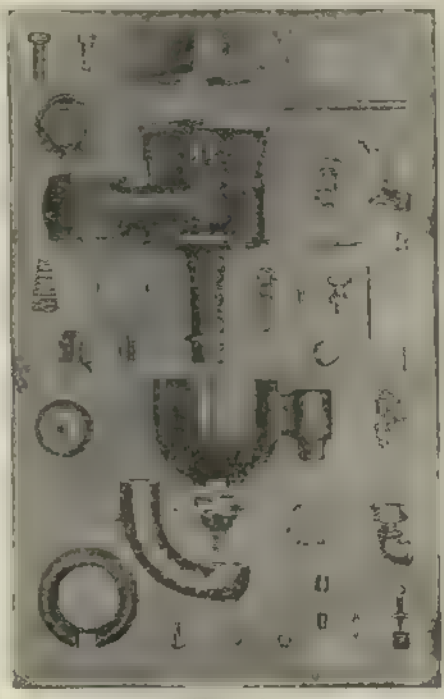
No. 130—Complete Case and Base, as Shown; Case with 112 Drawers—56 for Bolts and Washers, 56 for Screws; Mounted on a Base 30 in. Square, 20 in. High, Containing 18 more Drawers for ⅝ and ¾ in. Bolts and Washers. 67.00
Weight 480 Lbs. Each

SCHEBLER CARBURETOR PARTS



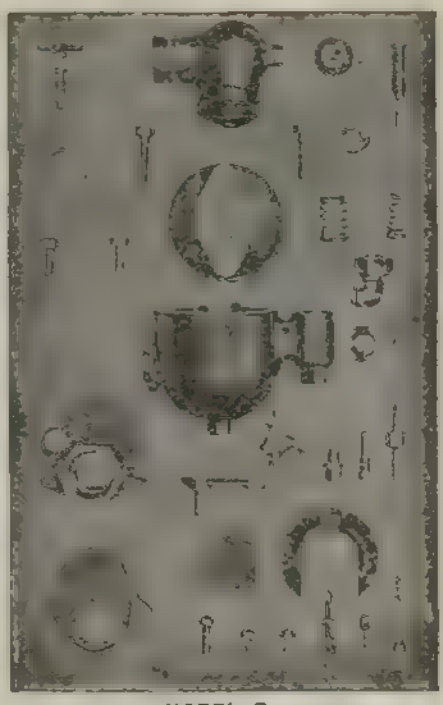
MODEL R

	1, 1¼ In Each	1½ In Each
Body Complete	$16	$17 00
Bowl Complete	7.50	7 50
No. A—Compensating Air Valve Complete	1.50	2 00
No. B—Bowl	5.00	5 00
No. C—Carburetor Body	7 00	8 00
No. D—Spray Nozzle	.20	.20
No. E—Needle Valve	.20	.20
No. F—Cork Float	.50	.50
No. G—Gasoline Union	.30	.30
No. H—Float Valve	.20	.20
No. I—Venturi Tube	.60	60
No. J—Float Lever	20	20
No. K—Throttle Disc	10	10
No. M—Air Valve Adjusting Screw	30	30
No. N—Bowl Gasket	10	10
No. O—Air Valve Spring	10	10
No. P—Needle Valve Lift Lever	1.00	1 00
No. Q—Throttle Lever	.40	40
No. R—Throttle Shaft Adjusting Stop	.40	.40
No. S—Dash Control Shaft Bearing	.20	.30
No. T—Drain Cock	.40	.40
No. U—Bowl Cap	.30	.30
No. V—Dash Control Blank Plug	.20	.20
No. W—Dash Control Shaft	30	.30
No. X—Dash Control Lever	.40	.40
No. Y—Binding Post	20	.20
No. 1—Venturi Tube Lock Screw	10	.10
No. 2—Air Bend	2 00	2 00
No. 3—Dash Pot Air Valve Seat	2 00	2 50
No. 4—Float Washer and Screw	20	.20
No. 5—Flange Cap Screws	.10	.10
No. 6—Float Valve Retainer Nut	10	.10
No. 7—Float Lever Screw	.10	.10
No. 8—Throttle Shaft	.30	.30
No. 9—Bowl Lock Nut	.20	.20
No. 10—Throttle Shaft Collar	.10	.10
No. 11—Throttle Shaft Gasket	.10	.10
No. 12—Dash Control Tube Lock Screw	.10	.10
No. 13—Float Lever Screw Bearing	.10	.10
No. 14—Throttle Lever Lock Screw	.10	.10
No. 15—Air Valve Friction Lever	.20	.20
No. 15—Air Valve Friction Lever Pin	.10	.10
No. 17—Dash Control Shaft Gasket	.10	.10
No. 18—Air Bend Lever Shaft Spring	.60	.60
No. 19—Air Bend Disc	.10	.10



MODEL L

	1, 1¼ In. Each	1½ In Each
Body Complete	$15.00	$17.50
Bowl Complete	6.50	7.50
No. A—Leather Air Valve Disk	.50	.50
No. B—Bowl Casting	5.00	6.00
No. C—Body Casting	8.00	10.00
No. D—Spray Nozzle	.20	.20
No. E—Needle Valve	.20	.20
No. F—Cork Float	.50	.50
No. G—Gasoline Union	.30	30
No. H—Float Valve	.20	.20
No. I—Needle Valve Adjusting Knurl	.20	20
No. J—Float Lever	.20	20
No. K—Throttle Disc	.10	.10
No. L—Air Valve Cap	1.50	1.50
No. M—Air Valve Adjusting Screw	.20	.20
No. N—Cork Gasket for Bowl	.10	.10
No. O—Air Valve Spring	.10	.10
No. P—Needle Valve Lift Lever	.40	40
No. Q—Throttle Lever	.40	.40
No. R—Flange	1 00	2.00
No. S—Throttle Stop Screw	10	.10
No. U—Bowl Cap	30	.30
No. V—Flusher	50	.50
No. W—Needle Valve Lift Lever Pin	.10	.10
No. X—Needle Valve Guide	.30	30
No. Y—Needle Valve Lift Lever Spring	.10	.10
No. Z—Cam Complete	1.00	1.00
No. 1—Throttle Stop Lock Screw	.10	.10
No. 2—Air Bend	2.00	2.00
No. 3—Air Valve Seat	2 00	2.00
No. 4—Float Washer and Screw	.20	.20
No. 5—Flange Cap Screw	.10	.10
No. 6—Float Valve Retainer Nut	.10	10
No. 7—Float Lever Screw	.10	.10
No. 8—Throttle Shaft	.30	.30
No. 9—Bowl Lock Nut Casting for Air Bend	.50	50
No. 10—Air Bend Lock Nut	.10	.10
No. 11—Throttle Lever Lock Screw	.10	.10
No. 12—Water Jacket Plug	.10	.10

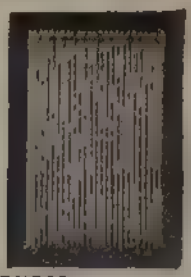


MODEL D

	½, ¾, 1, 1¼ In Each	1½ In. Each
Air Valve Complete	$4 00	$5 00
Bowl Complete	9.00	12 00
Throttle Complete	4.00	6.00
No. A—Leather Air Valve Disk	.20	.20
No. B—Bowl Casting	6 00	9 00
No. C—Butterfly Shutter Complete	.50	.50
No. D—Spray Nozzle	.20	.20
No. E—Needle Valve	.20	.20
No. F—Cork Float	.50	.50
No. G—Gasoline Union	.30	.30
No. H—Float Valve	.20	.20
No. J—Float Lever	.20	.30
No. K—Throttle Disk	.10	.10
No. L—Lid	2.00	3 00
No. M—Air Valve Adjusting Screw	.20	20
No. N—Cork Gasket for Lid	.10	10
No. O—Air Valve Spring	.10	10
No. P—Throttle Back	1.50	2 00
No. Q—Throttle Lever	.40	.40
No. R—Throttle Front with Pipe Thread	2 00	3.50
No. S—Throttle Top Screw	.10	.10
No. T—Drain Cock	40	.40
No. U—Bowl Cap	30	.30
No. V—Flusher (See Part V Model L)	50	.50
No. W—Lock Nut for Adjusting Screw	.10	.10
No. X—Needle Valve Connection	.20	.20
No. Y—Lock Spring, for Adjusting Screw	.10	.10
No. 1—Throttle Stop Lock Screw	10	.10
No. 2—Air Valve Cap Screw	10	10
No. 3—Air Valve Casting	3 00	4.00
No. 4—Float Washer Screw	20	.20
No. 5—Throttle Cap Screw	10	.10
No. 6—Float Valve Retainer Nut	10	.10
No. 7—Float Lever Screw	.10	.10

In Ordering Parts Be Sure to Specify Size and Model of Carburetor

NEEDLES



SMITH HARNESS

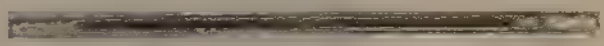
No. 64—Round Eye

Size Nos.	000	00	0	1	2	3	4	5	7	8
Per Paper	$0.21	.21	.21	.17	.17	.17	.17	.17	.17	.17

No. 66—Egg Eye

Size Nos.	000	00	0	1	2	3	4	5	7	8
Per Paper	$0.21	.21	.21	.21	.17	.17	.17	.17	.17	.17

Twenty-five in a Paper



HARNESS MACHINE NEEDLES

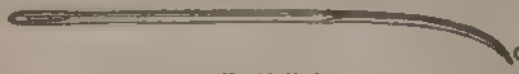
For Wax Thread Lock Stitch Machine, Finest Steel, Extra Temper, Warranted

No. 68—For Landis Machine

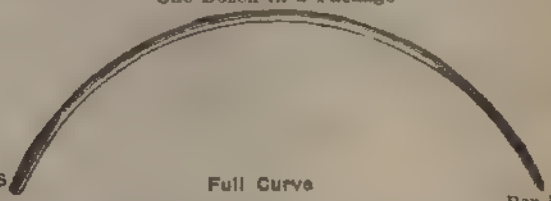
No. 70—For Pearson Machine

Size Nos.	2	3	4	5	6	7
Per Dozen	$2.11	2.11	2.11	2.11	2.11	2.11

One Dozen in a Package



NICHOLS COLLAR NEEDLES



Full Curve

No. 72—Half Curve

Length, In.	3	3½	4	5	6	6½
Per Dozen	$0.83	1.05	1.36	1.68	1.89	2.32

One Dozen in a Package

	Per Dozen
No. 74—3 in. Long before Bent	$0 98
No. 76—4 in. Long before Bent	1 43

No. 78—SMITH GLOVERS'; for Leather and Buckskin

Size Nos.	000	00	0	1	2	3	4	5	6	7
Per Paper	$0 32	.32	32	32	32	.32	.32	.32	.32	.32

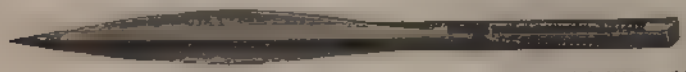
Twenty-five in a Paper

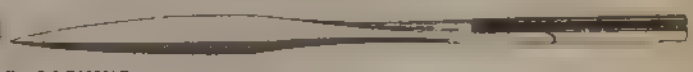
KNITTING NEEDLES

Length 8 in.

Size Nos.	10	11	12	13	14	15	16
Per Gross	$1 90	1 47	1 16	.95	.88	.84	.76

Three Dozen in a Package





PACKING OR SACKING

KIRBY SPRING EYE, with Cutter

Cutter is in Eye

Length, In.	4	4½	5	5½
Per Dozen	$2.34	2.34	2.34	2.34

One Dozen in a Box

No. 20—GERMAN BENT

Length, In.	3	3½	4	4½	5	5½	6	8
Per Gross	$1.68	1.79	1.90	2.11	2.63	2.84	3.16	3.70

Three Dozen in a Package

JAMES, STRAIGHT

Length, In.	3½	4	4½	5	5½	6
Per Gross	$2.11	2.63	3.70	4.21	5.26	6.00

Three Dozen in a Box

SAIL, BEST QUALITY

For Sail or Tent Making and Canvas Work

No. 80—Jas. Smith, Size Nos. are English Wire Gauge

Size Nos.	17	17½	16	16½	15	15½	14	14½	13	12
Length, In.	2⅛	2⅛	2⅜	2⅛	2⅝	2¾	2⅞	3	3⅛	3⅜
Per Paper of 25	$0.53	.53	.53	.53	.53	.53	.63	.63	.74	1.05

No. 80C—COMMON, BLUED STEEL SAIL OR PACKING

Size Nos.	5	6	7
Length, In.	2½	2⅝	3
Wire Gauge	14½	14	13½
Per 100	$1.47	1.58	2.63

Twenty five in a Paper

GRAIN, BARR BROS.

English Needle Steel, Correctly Shaped Spring Eye, with Cutter

	No. 4166P1—Bright			No. 4166P2—Blued	
Length, In.	4	4¼	4½	4¾	5
Per Dozen	$....	....	....	....	....

GRAIN, HARTFORD

Spring Eye, Bright; with Cutter

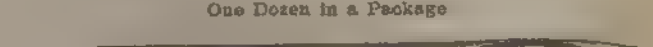
Length, In.	4	4¼	4½	4¾	5
Per Dozen	$....	....	....	....	....

FLOUR, BARR BROS.

Spring Eye, Bright, with Cutter; Smaller than Grain Needle

Length, In.	4¼	4½	4¾	5
Per Dozen	$....	....	....	....

One Dozen in a Package



UPHOLSTERERS OR MATTRESS, DOUBLE POINTED

	Per Dozen
Length 12 in.	$1.68
Length 14 in.	1.90

Three Dozen in a Package

SAILORS' PALMS

For Collar Palms, see page 3699

	Per Dozen
No. 82—Used in Sewing Canvas and other Heavy Material, Extra Strong Stitched; Raw Hide Thimble	$3.16

One in a Package; Weight 1⅝ Lbs. per Dozen

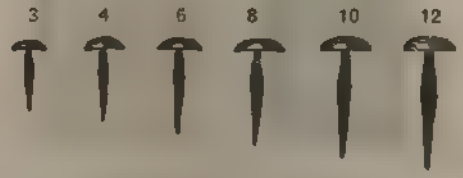
SADDLERY NAILS

No. 1878—SADDLE NAILS

Extra Heavy Metal, Oval Head, XC Plate; Spun Back

Diam. Head, In.	5/8	3/4	7/8
Length Nail, In.	7/8	1	1 1/8
Weight Gross, Lbs.	1	1 1/4	1 1/2
Per Gross	$0.70	80	.94

1/8 in., One Gross Balance Half Gross in a Box



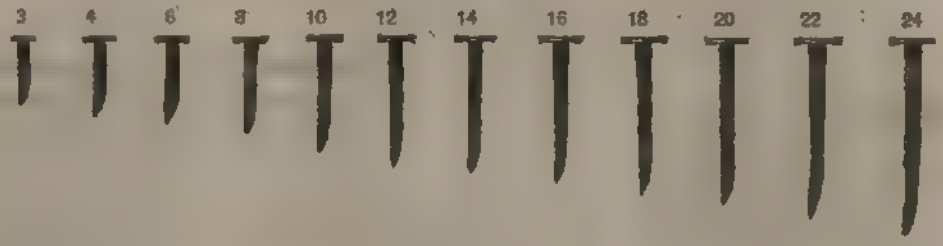
LINING NAILS, OVAL CAPPED

For Numbers and Prices see Tool Dept. Page

Ounces	3	4	6	8	10	12
Length, In.	3/8	7/16	1/2	9/16	5/8	11/16
Weight Package, Lbs.	1 1/2	1 3/4	2 3/4	3 1/2	4 1/2	5

75 in a Paper; Twenty Papers in a Package

SADDLERY TACKS

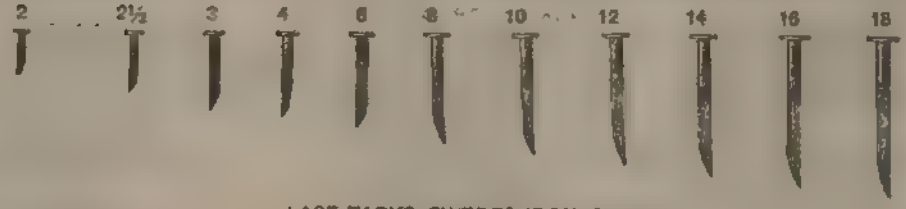


CUT TACKS, SWEDES IRON, BLUED

In One Pound Papers

Ounces	2	2 1/2	3	4	6	8	10	12	14	16	18	20	22	24
Length, In.	1/4	5/16	3/8	7/16	1/2	9/16	5/8	11/16	3/4	13/16	7/8	15/16	1	1 1/8
Per Pound	$0.40	.40	.36	.30	30	26	.26	.24	.24	.24	.24	.24	.24	.24

One Dozen Papers in a Package



LACE TACKS, SWEDES IRON, BLUED

In One Pound Papers

Ounces	2	2 1/2	3	4	5	8	10	12	14	16	18	20
Length, In.	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8	15/16	1	1 1/16	1 1/8
Per Pound	$0.40	.40	.36	.30	.30	.26	.24	.24	.24	.24	.24	.24

One Dozen Papers in a Package

SLIDE LOOP FASTENERS

No. 1 No. 2 No. 3 No. 4

Black Japanned

Made of Sheet Steel, Stiff yet may be Clinched without Breaking; Finish will not chip off in driving

Nos.	1	2	3	4
Size, In.	3/4 x 3/4	11/16 x 3/4	11/16 x 7/8	3/4 x 7/8
Length Prongs, In.	1/2	1/4	1/4	5/8
For Loops, In.	5/8	1/2	5/8	1
Weight Gross, Lbs.	1/8	1/4	3/8	1/2
Per Gross	$0.60	.70	.80	.90

One Gross in a Neatly Labeled Box

FOOT PRESSES

For Driving Slide Loop Fasteners

This Press is loaned with first order for not less than 40 Gross of Fasteners; They are never sold, and always remain the property of the Williamsport Staple Co.

Height 44 in., Ball Balance; Sensible Foot Pedal, Steel Mandrel; Adjustable Brass Stock, Brass Thumb Screw; Cast Iron Head and Frame; Weight 50 Lbs.

SHOW PEN PENDANTS

All Show-Pen Pendants and Plates are Interchangeable

The Patterns shown on this page give a selection of Pendants suitable for a large variety of Shower Effects; We show a few suggestions on the following pages which give a good idea of the possibilities to be obtained by their use; One of the advantages of these Pendants over Chain Fixtures is the fact that the Wiring is Concealed from view; made of Heavy, Solid Brass with a pair of Loops on each end and a Hexagon Nut on one end to fasten to the Shell.

Brushed Brass Finish

NO. 2019—PENDANTS

Plain Round Pattern; especially for commercial work.

	Each
No. 2019—12 in.	$0.60
No. 2019—15 in.	.75
No. 2019—18 in.	.90
No. 2019—24 in.	1.20

Brushed Brass Finish

NO. 2043—PENDANTS

Neat and Light; Colonial Pattern.

	Each
No. 2043—6¾ in.	$0.60
No. 2043—12 in.	.80
No. 2043—15 in.	.95
No. 2043—18 in.	1.10
No. 2043—24 in.	1.40

Brushed Brass Finish

NO. 2028—PENDANTS

Plain Square Pattern; especially for use with Square Plates.

	Each
No. 2028—12 in.	$1.00
No. 2028—15 in.	1.20
No. 2028—18 in.	1.40
No. 2028—24 in.	1.60

Brushed Brass Finish

NO. 2046—PENDANTS

	Each
No. 2046— 9 in.	$0.75
No. 2046—12 in.	.90
No. 2046—15 in.	1.10
No. 2046—18 in.	1.25
No. 2046—24 in.	1.50

Brushed Brass Finish

NO. 2069—PENDANTS

With Sheffield Ornaments to go with Sheffield Plates.

No. 2069—8½ in.	$0.75
No. 2069—12 in.	.90
No. 2069—15 in.	1.00
No. 2069—18 in.	1.25
No. 2069—24 in.	1.50

The Combinations Shown on the following pages are only suggestions and show but a small number of the Combinations which are possible with the Show-Pen Line of Pendants and Plates; We will be pleased to offer suggestions or make up any combinations desired.

SHOW PEN PENDANTS

All Show Pen Pendants and Plates are Interchangeable

The Show Pen Line is the Latest, Most Practical and Most Popular Creation in Electric Fixtures; their handsome appearance is not marred by unsightly wires which are concealed from view inside the Tube; made of Heavy, Solid Brass with a pair of Loops on each end and a Hexagon Nut on one end to fasten to the Shell.

An almost endless variety of pleasing Shower Effects can be obtained by use of these Pendants; we show a few suggestions on the following pages which give a good idea of the possibilities to be obtained by their use.

Brushed Brass Finish

NO. 2012—PENDANTS

Especially for Flanders or Old English Fixtures.

	Each
No. 2012—10½ in.	$1.10
No. 2012—15 in.	1 40
No. 2012—18 in.	1 60
No. 2012—24 in.	1.90

Brushed Brass Finish

NO. 2017— PENDANTS

	Each
No. 2017—12 in., One Ornament	[illegible]
No. 2017½—12 in., Two Ornaments	1.00
No. 2017—15 in., Two Ornaments	1.20
No. 2017—18 in., Three Ornaments	1.50
No. 2017—24 in., Four Ornaments	1.90

Brushed Brass Finish

NO. 2016—PENDANTS

Very appropriate for use with Square Plate. Equipped with Square Terminals.

	Each
No. 2016—12 in.	$1.20
No. 2016—15 in.	1.35
No. 2016—18 in.	1.60
No. 2016—24 in.	1.85

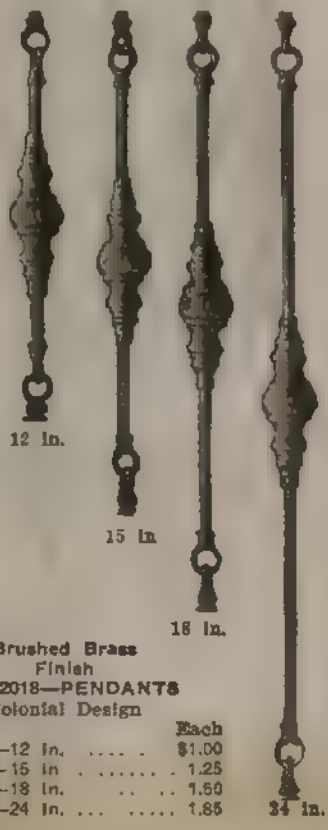
We are always pleased to offer any suggestions or to give the benefit of our experience in making up different Combinations of Pendants and Plates; The Show-Pen Line is extremely easy to install; All Parts are Interchangeable and there is nothing complicated about them.

Finish

NO. 2015—PENDANTS

Colonial Pattern

	Each
No. 2015—10½ in.	$0 90
No. 2015—15 in.	1.10
No. 2015—18 in.	1.25
No. 2015—24 in.	1.50



Brushed Brass Finish

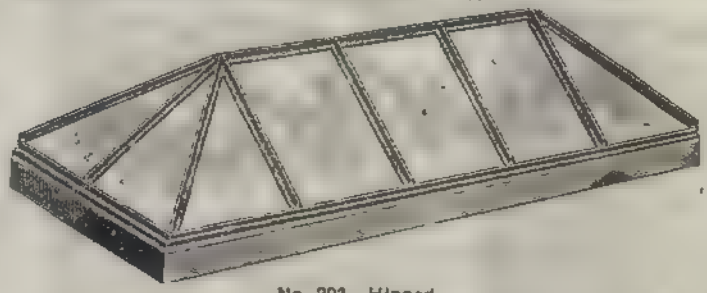
NO. 2018—PENDANTS

Colonial Design

	Each
No. 2018—12 in.	$1.00
No. 2018—15 in.	1.25
No. 2018—18 in.	1.50
No. 2018—24 in.	1.85

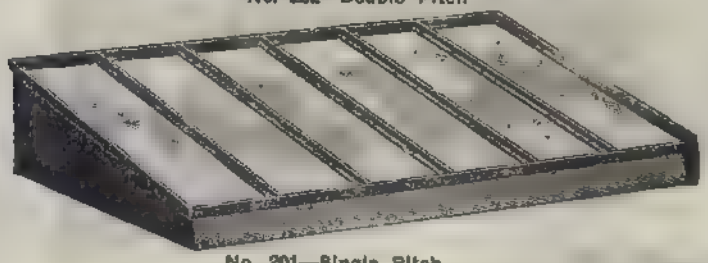
SKYLIGHTS

The Frames are made of Galvanized Steel, strongly riveted, with well fitted and soldered joints. Made to fit over wooden curbs. In ordering, the outside measurements of the wood curb and the thickness of wood must always be given to insure a good fit. When Glass is properly set, they are less liable to leak than any other form of skylight. Any kind or thickness of Glass can be furnished, Plain, Rough, Hammered, ⅛, ¼ or ⅜ in. Ribbed or ¼ in Wired Glass; or will be sent without glass, if so wanted.



No. 203—Hipped

No. 202—Double Pitch



No. 201—Single Pitch

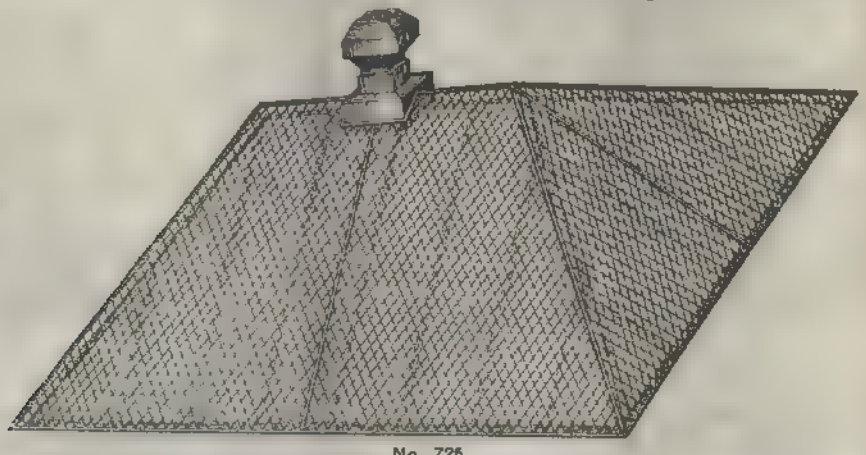
Unless otherwise ordered, ¼ in. Ribbed Glass is sent and is included in following list prices each. We do not furnish the Wooden Curbs. Copper Frames made to Special Order.

Size Feet	No. 203 Hipped	No. 202 Double	No. 201 Single	Approx. Weight Each, Lbs. No. 203	No. 202	No. 201
3x 3	$ 15.00	$ 13.00	$12.00	73	64	55
3x 4	16.00	14.00	13.00	96	84	73
3x 5	17 00	15 00	14 00	121	106	95
3x 6	20.00	18 00	17.00	145	130	115
4x 4	18 00	16.00	15.00	128	115	100
4x 5	22 00	20 00	18.00	160	150	135
4x 6	24 00	22 00	20.00	192	175	160
4x 7	28 00	26 00	23.00	224	200	185
4x 8	32.00	29 00	27.00	256	230	200
5x 5	25 00	23.00	20.00	199	185	170
5x 7	35 00	32.00	28.00	281	260	240
5x 8	40 00	36.00	32 00	320	290	270
5x 9	45 00	41.00	36.00	364	340	320
5x10	50 00	45.00	40.00	401	370	350
5x11	55 00	50 00	44 00	441	410	385
6x 6	36 00	33 00	29 00	288	270	255
6x 7	42 00	38.00	37.00	338	310	290
6x 8	48 00	44.00	39.00	384	360	340
6x10	60 00	54.00	48 00	480	440	410
6x12	72 00	65 00	58 00	576	550	520
6x14	84 00	76 00	67.00	672	640	610
7x10	70 00	63.00	56.00	562	530	500
7x12	84 00	76.00	67 00	672	630	600
8x14	112 00	100.00	90 00	896	850	810

Approximate Weights of Skylights include Glass and Putty. Crated for Shipment, with ¼ in. Wired Glass; If made with Ribbed Glass, deduct 1 Lb. per Sq. Ft.

SKYLIGHT GUARDS

We can furnish Guards for any Style of Skylight shown above
In writing for Prices give all Measurements and send Sketch showing arrangement of Skylight



No. 725

There is such a variety of sizes, shapes, etc., that it is difficult to give here other than approximate prices. Give the sizes you want the work made, in addition to sketch showing arrangement of skylight; Price includes painting one coat green; These guards are usually raised from 4 inches to 6 inches from the glass.

In writing for price, state whether you desire the supports for raising the guard work, and whether these supports are to be attached to wood or iron.

This guard is raised about 6 inches from the glass, by being attached to the wall on one side and to the top of the skylight frame, with iron supports, on the other three sides.

	Per Sq. Ft.
Made of 1 in. Mesh, No. 13 Wire, ⅛ in. Frame	$0.25
Made of 1¼ in. Mesh, No. 12 Wire, ⅛ in. Frame	.25
Made of 1½ in. Mesh, No. 11 Wire, ⅜ in. Frame	.27
	Each
Extra for Supports	$0.10

Skylight Guards can be made of Galvanized Wire at an additional cost of 10 per cent; When made of Galvanized Wire, we do not paint the Guards, unless so ordered

For Skylight Openers, See Page 157

METAL FIRE PROOF WINDOWS

Automatic Hollow Sheet Metal Fire Proof Window Frames

Showing Exterior View of No. 685 Metal Windows

No. 685—METAL WINDOWS

Top Pivoted, Mullion Window with Center Sash Stationary; Pivoted Sash closes Automatically in case of Fire; For Factories, Mills and Warehouse Buildings, where Light and Ventilation are essential.

Prices on Receipt of Specifications, giving Number of Windows, description of the kind of Sashes required, and size of openings.

Showing Interior View of No. 685 Metal Windows

General Description

The windows are glazed with glass one-quarter inch thick, in which wire is embedded through the center, so that if the glass does break the wire still holds it in place, effectually resisting intense heat and withstanding the application of water upon the heated glass, when used to extinguish fire. The diffusion of light is not retarded in the slightest, but is quite equal to ordinary plain glass. The glass is securely held in the frame in such a manner that by merely inserting it in the grooves provided for that purpose, it will remain without other means, but a pocketed rabbet is also provided so that the finishing of the glazing is effected by simply pointing up the joint. Asbestos or other putty may be used, but common putty is all that is necessary, as the glass does not depend on the putty for holding it in place; Many practical tests of the fire-resisting efficiency of this window have been made, and they are universally endorsed by the various Boards of Fire Underwriters, who give reduced insurance rates where they are used; These windows obviate the use of iron shutters, which often overcomes the necessity of striking matches or of carrying artificial light in a darkened room during daylight, and they also overcome the objection of firemen against shutters when fighting fire, of offering obstruction, as, if necessary, they may be chopped away, and an opening effected. The sheet metal frame, when properly constructed and cared for, when made of galvanized iron, will last as long as any other part of the building, and when cold rolled copper is used, its duration is without limit.

SLIDING BARN DOOR HANGERS

WATERSHED ROUND TREAD DOOR TRACK AND HANGERS

The Cylindrical Wheel Tread and the Watershed Extension below the tread make the hangers run with the least possible friction and the weight of the door is distributed along the entire length of the track

The Track is weather, bird, dirt and water proof.

An Oil Hole in the malleable joint bracket corresponding with a hole in the track permits easy oiling of the hanger bearings

Hangers are tandem type, of non-breakable malleable iron, roller-bearing and adjustable to doors of different thickness.

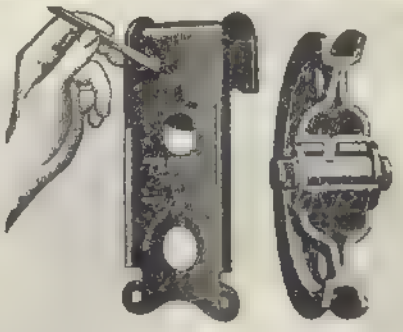
Per Dozen Pairs

No. 1010H—Hangers; Japanned $22.00
Weight 115 Lbs. per Dozen Pairs

Per 100 Feet

No. 1010T—Track; Japanned, in 6, 8 and 10 ft. Lengths; Weight 240 Lbs. per 100 Feet $22.00

One Pair in a Box with Joint Bracket, two End Stops, Bolts for mounting Hangers and sufficient Lag Screws for 16 ft. of Track.

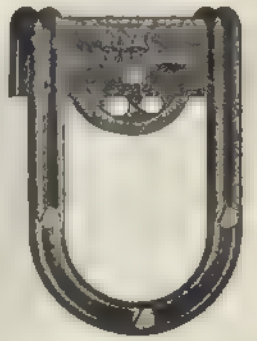


PROUTY

Per Dozen Pairs

No. 77—Roller Bearing, 3½ in. All-Steel Wheel, Hardened Cups, Rollers and Shaft Corrugated Frame, 11x5¼ in., with Special Drop Slide to Prevent Derailing; Tested to Carry an 800 Lb. Door.....$13.00

One Pair in a Carton, Complete with Bolts; Weight 8 Lbs. Pair



RIVAL

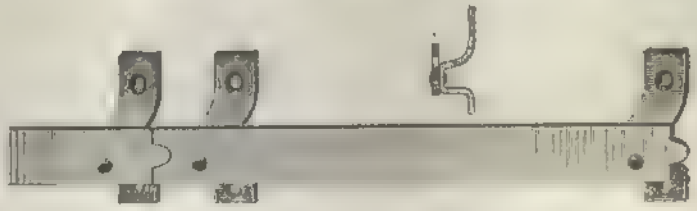
Per Dozen Pairs

No. 88—Roller Bearing, 3½ in. Cast Iron Wheel, ⅝x1 in. Corrugated Steel Frame, Size 12x7 in.; Guaranteed to carry a 600 Lb. Door.....$9.60

One Dozen Pairs in a Crate; Weight 70 Lbs. Crate

Use ⅜x2½ in. Carriage Bolts

BARN DOOR TRACK OR RAIL



STANDARD BRACKET TRACK

Per 100 Feet

No. 145—⅜x1 in., Japanned Wrought Steel Track with Riveted Brackets $5.50
In 4, 6, 8 and 10 ft. Lengths; Weight 80 Lbs. per 100 ft.

Will carry Climax, Rival, Prouty or any other Regular Grooved Wheel Hanger, but not the Hinged. Use No. 12 Wood Screws, ¼ in. Lag Screws or 20d Nails.

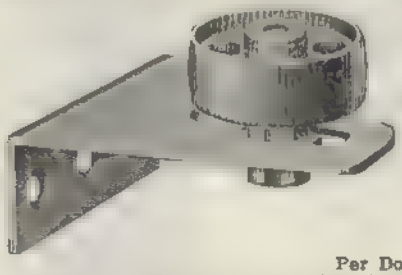
BARN DOOR STAY ROLLERS OR FLOOR GUIDES

WAREHOUSE DOOR STAY ROLLERS

Each

No. 367—Non-breakable Malleable Iron, Japanned; 7 in. Wide, 8 in. High, by 6 in. Deep; Wheel 3½ in. Diam.; Has three slotted holes for ⅝ in. Diam. Lag Screws; It is generally applied with 3½x⅝ in. Lag Screws $0.80

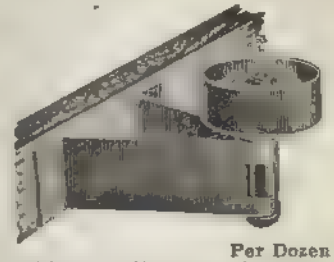
Weight 3¼ Lbs. Each



Per Dozen

No. 11C—Adjustable and Reversible, for Doors 1⅛ to 2⅝ in. Thick; Flange 4 in. Wide, Projection 4 in.; Japanned Wrought Steel; Takes No. 10 Screws $1.60

Open Stock; Weight 10 Lbs. per Dozen



Per Dozen Pairs

No. 3—Hinged Adjustment, by Spreading or Closing Legs from 0 to 2½ in. Wide; No Nuts to Loosen Adjustment; Use No. 12 or 14 Screws, or 20d Nails $2.00

Open Stock; Weight 9 Lbs. per Dozen

BARN DOOR HOLDERS OR GRAVITY CATCHES

Per Dozen

No. 11S—To Screw, Japanned Steel, 1x2 in. Wheel, ⅜x6 in. Shank $1.50

Open Stock; Weight 6 Lbs. per Dozen

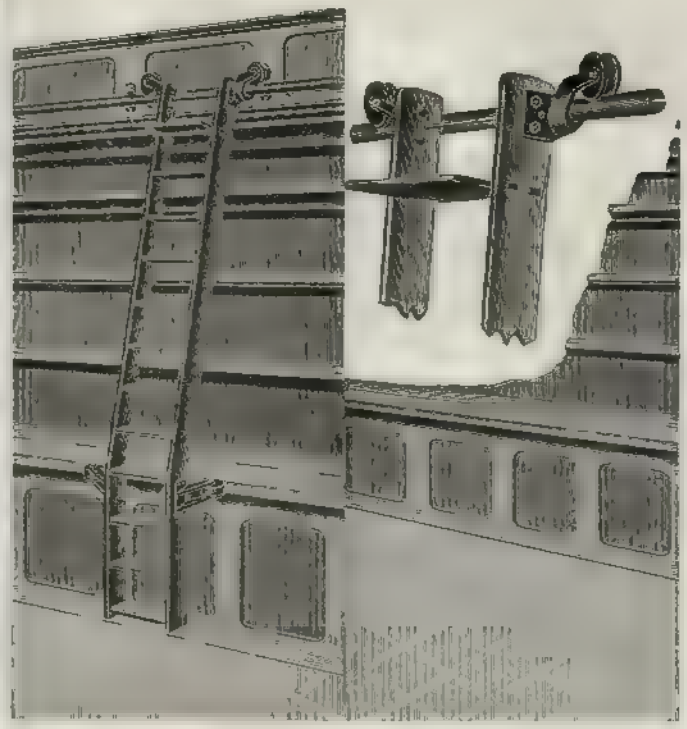
Per Dozen

No. 24—Japanned Cast Iron, Gravity Locking, Door Catch; for Barn or Basement Doors, Gates, Etc., not over 1 in. Thick; Catches, Holds Open, and Prevents Swinging by Wind...$1.50

One Dozen in a Box

Weight 6½ Lbs. per Dozen

RELIABLE ROLLING STORE OR SHELF LADDERS



RELIABLE STRAIGHT SIDE LADDERS

For use where there is no base shelf and the Trolley, Ladder is impractical.

The Track is ⅞ in. diam. round steel tube on special brackets, of the same construction as the Reliable Barn, Parlor and Fire Door Track.

The Ladder is made of selected kiln dried lumber; rubbed, oiled, filled and varnished; the sides are 3½ in. wide, the steps are 4 in. deep and the ladder is 12 in. wide inside. Each step is mortised into the side pieces and fastened with four screws; three stay bolts give extra strength to the sides and steps.

The Hangers are adjustable, giving a perfect bearing at any angle; there is a free movement of ladder with uneven floor or ceiling and the four wheels prevent binding or derailing; 2 in. Hard Paper Noiseless Wheels, with Brass Bushings.

The Floor Travelers are 4 in. Diam., rubber tired

Each

No. 80—Solid Oak Ladedr, Fitted Complete $22.00
Weight 4 Lbs. per Foot

Per Set

No. 81—Upper and Lower Fixtures Only, Regularly Furnished for 12 in. Ladder; Weight 10 Lbs. per Set.....$10.00

Per Foot

No. 1L—⅞ in. Tubular Steel Track, with Brackets.....$0.13
Weight 80 Lbs. per 100 Feet

In Ordering, give height from floor to center of track; length of track and number of brackets (about 4 ft. apart as uprights permit).

RELIABLE BENT BASE LADDERS

The Track is 1⅞ in. diam round steel tube on special brackets; of the same construction as the Reliable Barn, Parlor and Fire Door track.

The Ladder is made of selected kiln dried lumber; rubbed, oiled, filled and varnished; the sides are 3½ in. wide, the steps are 4 in. deep and the ladder is 12 in. wide inside. Each step is mortised into the side pieces and fastened with four screws, three stay bolts give extra strength to the sides and steps.

The Hangers are malleable iron, with great strength and wide bearing on both track and base shelf; wheels are 3½ in. diam., brass bushed, roller bearing, with hard paper tread.

The base ledge Travelers are rubber tired, with wide bearing

Each

No. 90—Solid Oak Ladder, Fitted Complete.....$20.00
Weight 4 Lbs. per Foot

Per Set

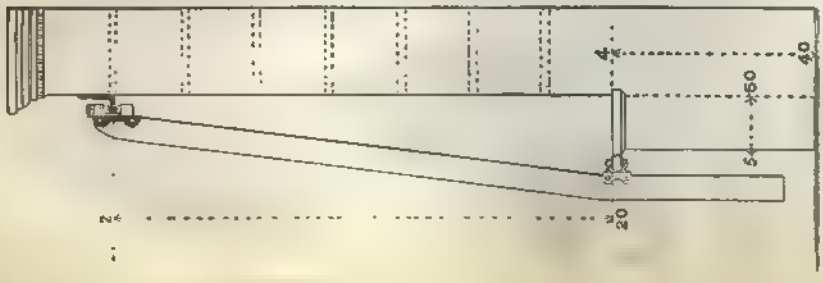
No. 91—Upper and Lower Fixtures Only, Regularly Furnished for 12 in. Ladder; Weight 8 Lbs. per Set.....$6.00

Per Foot

No. 2L—1⅞ in. Tubular Steel Track, with Brackets.....$0.16
Weight 120 Lbs. per 100 Feet

In Ordering, give height from floor to top of base ledge; width of base ledge to front of partitions of shelving; height from base ledge to center of track; length of track and number of brackets (about every 3 feet, as the uprights permit)

All can be furnished with a 9 in., Extra Deep Top Shelf, as shown in Right Corner, at no extra cost



In Ordering Ladders, give measurements as follows:

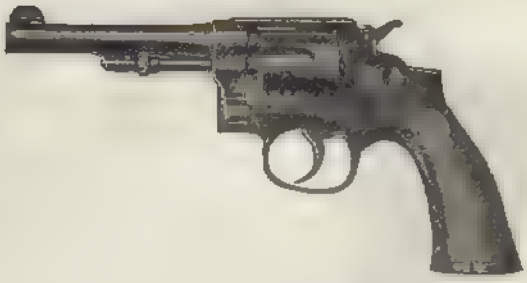
Bent Base Ladders, 2 to 20; 4 to 40 and 5 to 50

Straight Side Wall Ladders, give 2 to 40 (floor)

Trolley Ladders, give height, from floor to ceiling

All F. O. B. Danville, Ill., Direct Shipment Only

SMITH AND WESSON REVOLVERS



REGULATION POLICE MODEL

A Light Weight Revolver; New Patent Safety Hammer Block, Double Action; Solid Frame; Swing Out Cylinder; Checkered Wood Stock; Hammer is positively blocked against accidental discharge.

32 S. & W. CALIBER; BLUED FINISH; 5 SHOTS

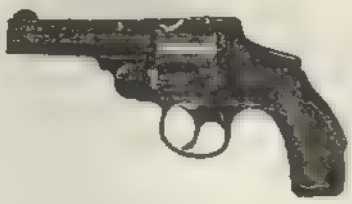
Shoots 32 S. & W., 32 S. & W. Long and 32 Colts New Police Cartridges

	Each
No. 127—3¼ in. Barrel; Weight 17¾ Oz Each	$21.00
No. 128—4¼ in. Barrel; Weight 18 Oz. Each	21.00
No. 129—6 in. Barrel; Weight 19 Oz. Each	21.00

38 S. & W. CALIBER; BLUED FINISH; 5 SHOTS

Shoots 38 S. & W., 38 S. & W. Long and 38 Colts New Police Cartridges

	Each
No. 130—4 in. Barrel; Weight 30 Oz. Each	$21 00



NEW DEPARTURE, DOUBLE ACTION, HAMMERLESS

Hinged Frame, Automatic Ejector, Rubber Stock, Holds 5 Shots; Has Safety Lever which makes accidental discharge impossible, as the Stock must be held firmly and the Trigger pulled, in order to fire.

32 S. & W. CALIBER; BLUED FINISH

	Each
No. 108—3 in. Barrel; Weight 14¼ Oz. Each	$16.00

38 S. & W. CALIBER; BLUED FINISH

Will also use 38 Colt Police Paltive Cartridges

	Each
No. 112—3¼ in. Barrel; Weight 17 Oz. Each	$18.00
No. 114—4 in. Barrel; Weight 17¼ Oz. Each	18.00

TARGET REVOLVERS

Double Action, Hammer Target Revolvers

22 CALIBER PERFECTED

Solid Frame, Swing Out Cylinder, Hand Ejector; Walnut Stock, Square Butt; S. & W. Target Sights, Ho ds 7 Shots

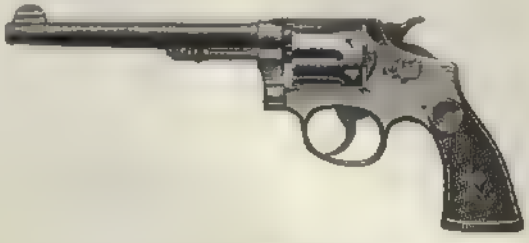
	Each
No. 116—6 in. Barrel; Blued Finish, Weight 11½ oz. Each	$17 00

Cartridge best adapted to this arm is 22 S. & W. Long.

MODEL 1911, 22 LONG RIFLE CALIBER

Heavy Solid Frame, Swing Out Cylinder, Hand Ejector; Circassian Walnut Checkered Stock inlaid with S. & W Gold Monogram Square Butt; S. & W. Target Sights; Holds 6 Shots

	Each
No. 118—6 in. Barrel, Blued Finish; Weight 23 Oz. Each	$22 00



MILITARY MODEL 1905

Double Action, Solid Frame Swing Out Cylinder, Hand Ejector, Checkered Walnut Stock, Square Butt, Ho ds 6 Shots

32 W. C. F. CALIBER; BLUED FINISH

	Each
No. 122—6 in. Barrel; Weight 35 Oz. Each	$20 00

38 S & W. SPECIAL CALIBER, BLUED FINISH

Will also use the 38 Long Colt Caliber Cartridges

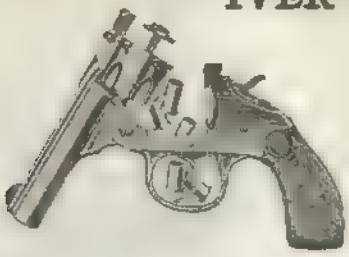
No. 124—4 in. Barrel; Weight 33 Oz. Each	$20 00
No. 126—6 in. Barrel; Weight 35 Oz. Each	20 00

All the Above, One in a Box with Cleaning Brush

For Cleaning Brushes see page 3031; Ammunition 3008 to 3018

IVER JOHNSON REVOLVER

NEW 1910 MODEL



All Iver Johnson Revolvers have Safety Lever which makes Accidental Discharge an Impossibility

Hinged Frame, Automatic Ejector, Rubber Stock

SAFETY HAMMER, DOUBLE ACTION

22 Cal., Rim Fire. Holds 7 Shots, Blued Finish	Each
No. 223—3 in. Barrel; Weight 12¾ Oz. Each	$8 50
No. 224—4 in. Barrel; Weight 13¼ Oz. Each	9 00
No. 225—5 in. Barrel; Weight 14¼ Oz. Each	9.25
No. 226—6 in. Barrel; Weight 14¾ Oz. Each	9.50
32 S. & W. Cal., C. F., Holds 5 Shots, Blued Finish	
No. 323—3 in. Barrel, Weight 12¾ Oz. Each	8 50
No. 324—4 in. Barrel; Weight 13¼ Oz. Each	9 00
No. 325—5 in. Barrel; Weight 14¼ Oz. Each	9 25
No. 326—6 in. Barrel; Weight 14¾ Oz. Each	9 50
38 S. & W. Cal., C. F., Holds 5 Shots, Blued Finish	
No. 383—3¼ in. Barrel; Weight 17¾ Oz. Each	8 50
No. 384—4 in. Barrel; Weight 18½ Oz. Each	9 00
No. 385—5 in. Barrel; Weight 19 Oz. Each	9 25
No. 386—6 in. Barrel, Weight 19¾ Oz. Each	9 50
22 Cal., Rim Fire; Holds 7 Shots; Nickeled Finish	
No. 223N—3 in. Barrel; Weight 12¾ Oz. Each	8 00
No. 224N—4 in. Barrel; Weight 13¼ Oz. Each	8 50
No. 225N—5 in. Barrel; Weight 14¼ Oz. Each	8 75
No. 226N—6 in. Barrel; Weight 14¾ Oz. Each	9 00
32 S. & W. Cal., C. F.; Holds 5 Shots; Nickeled Finish	
No. 323N—3 in. Barrel; Weight 12¾ Oz. Each	8 00
No. 324N—4 in. Barrel; Weight 13¼ Oz. Each	8 50
No. 325N—5 in. Barrel; Weight 14¼ Oz. Each	8 75
No. 326N—6 in. Barrel; Weight 14¾ Oz. Each	9 00
38 S. & W. Cal., C. F. Holds 5 Shots Nickeled Finish	
No. 383N—3¼ in. Barrel; Weight 18 Oz. Each	8 00
No. 384N—4 in. Barrel, Weight 18½ Oz. Each	8 50
No. 385N—5 in. Barrel; Weight 19 Oz. Each	8.75
No. 386N—6 in. Barrel; Weight 19¾ Oz. Each	9 00

SAFETY HAMMERLESS, DOUBLE ACTION

32 S. & W. Cal., C. F.; Holds 5 Shots; Blued Finish	Each
No. 323H—3 in. Barrel, Weight 12¾ Oz. Each	$9 25
No. 324H—4 in. Barrel; Weight 13¼ Oz. Each	9 75
No. 325H—5 in. Barrel; Weight 14¼ Oz. Each	10 00
No. 326H—6 in. Barrel; Weight 15 Oz. Each.	10 25
38 S. & W. Cal., C. F.; Holds 5 Shots; Blued Finish	
No. 383H—3¼ in. Barrel; Weight 17¾ Oz. Each.	9 25
No. 384H—4 in. Barrel; Weight 18½ Oz. Each	9 75
No. 385H—5 in. Barrel; Weight 19¼ Oz. Each	10 00
No. 386H—6 in. Barrel; Weight 19¾ Oz. Each	10 25
32 S. & W. Cal., C. F.; Holds 5 Shots; Nickeled Finish	
No. 323NH—3 in. Barrel; Weight 12¾ Oz. Each	8 75
No. 324NH—4 in. Barrel; Weight 13¼ Oz. Each	9 25
No. 325NH—5 in. Barrel; Weight 14¼ Oz. Each	9 50
No. 326NH—6 in. Barrel; Weight 15 Oz. Each	9 75
38 S. & W. Cal., C. F.; Holds 5 Shots; Nickeled Finish	
No. 383NH—3¼ in. Barrel, Weight 17¾ Oz. Each	8 85
No. 384NH—4 in. Barrel, Weight 18½ Oz. Each	9 25
No. 385NH—5 in. Barrel, Weight 19¼ Oz. Each	9 50
No. 386NH—6 in. Barrel, Weight 19¾ Oz. Each	9 75

WITH WESTERN ONE-PIECE WALNUT GRIP

New One-Piece Walnut Grip fits the hand and allows perfect freedom of action without cramping of muscles; stronger and more beautiful than a two-piece Grip. Bottom Screw Fastening presses Grip firmly against Frame preventing any looseness.

SAFETY HAMMER, DOUBLE ACTION

22 Cal. Rim Fire, Holds 7 Shots, 6 in. Barrel; Weight 17 Oz. Each	Each
No. 226W—Blued Finish	$10.75
No. 26W—Nickeled Finish	10.25
32 Cal., S. & W. Center Fire, Holds 6 Shots, 4 in. Barrel, Weight 21 Oz. Each	
No. 324W—Blued Finish	$10 25
No. 34W—Nickeled Finish	9 75
38 Cal., S. & W. Center Fire, Holds 5 Shots, 4 in. Barrel; Weight 20 Oz. Each	
No. 384W—Blued Finish	$10 25
No. 38W—Nickeled Finish	9 75

HAMMERLESS, DOUBLE ACTION

32 Cal. S. & W., Center Fire, Holds 6 Shots, 4 in. Barrel; Weight 22 Oz. Each	Each
No. 324WH—Blued Finish	$11 00
No. 34WH—Nickeled Finish	10 50
38 Cal. S. & W. Center Fire, Holds 5 Shots, 4 in. Barrel; Weight 21 Oz. Each	
No. 384WH—Blued Finish	$11 00
No. 38WH—Nickeled Finish	10 50

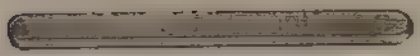
All Above One in a Box; No Cleaning Brush

For Pearl Stocks, suitable for above Revolvers, see page 2931; For Component Parts, see page 2982

Any of the Above 38 S. & W. Cal. Revolvers will also use 38 Colt Police Positive Cartridges

For Cleaning Brushes, see page 3031 Ammunition 3008-3018

SOLDER



HALF AND HALF

A Low Melting Solder, free from Antimony, flows freely, best for Roofers, Tinsmiths, Can Manufacturers, etc.

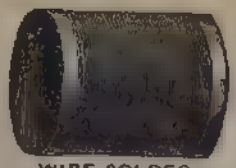
	Per Pound
Marswells; Warranted Strictly Half and Half; 50 Parts Tin to 50 Parts Lead	$....
Hartford; Half and Half, 48 Parts Tin to 52 Parts Lead	....
Size ⅛x1x12½ in.; Weight 1¾ Lbs. per Bar	

STANDARD WIPING

For Roof Repairing, Wiping Joints and for bright, showy work in general use.

	Per Pound
XX, Size of Bar ⅛x1x12½ in.; Weight 2 Lbs. per Bar	$....

Note—Poor Solder weighs more than good Solder of equal bulk; a small amount of impurity raises the melting point enormously.



WIRE SOLDER

Stubs Gauge No. 10, 13-100 in., 45 Parts Tin to 55 Lead; Smooth, Uniform Composition and Size; for Use on Can Capping Machines, in Electrical Plants, etc.

	Per Pound
In 100 Lb. Reels	$....
In 5 Lb. Coils	....

SOLDER

TINKERS' SOLDER

	Per Gross
6 in. Bars, for Home Use, Fine Quality, Free Flowing; Carries its own Flux and Salts; Fine for Repairing Pans, etc.	$12.00

One Gross in a Case; Wt. 23 Lbs. per Gross

SOLDERING SETS

GEM

LEADER

With one of these sets an inexperienced person, by following directions packed with each, can do all ordinary soldering of household utensils. Full Directions for Soldering with each Set.

	Per Doz. Sets
Set No. 6—Consists of 1 Soldering Copper, 10½ in. Long, with Plain Wood Handle; 6 in. Scraper, 1 Bar Solder, 1 Box Rosin; all in Neat Wooden Box, with Slide Cover. Weight 12½ Lbs. per Dozen Sets	$7.80
Set No. 7—Consists of 1 Soldering Copper, 11 in. Long, with Black Enameled Handle; 1 Scraper, 1 Box Rosin, 1 Piece of Wire Solder; all Packed in Neat Pasteboard Box. Weight 3½ Lbs. per Dozen Sets	$4.20

Open Stock

SOLDERING COPPERS

Without Wood Handles, Drawn Copper, Hammer Shaped

SQUARE POINTED

						Per Pound
For General Use, All Sizes						$0.60
Wt. Lbs., Pair	1	1½	2	2½	3	4
Length, In.	11	12	13	14	15	15
Wt. Lbs., Pair			5	6	7	8
Length, In.			15	15	16	18

FLAT WEDGE POINTED

			Per Pound
For Boiler Bottoms, Roofing Seams, etc.			$0.60
Weight Lbs., Pair	4	5	6
Length, In.	13½	15⅛	16½

Open Stock

TINNERS' SCRAPERS

For Scraping articles to be repaired, removing Solder, etc.; Can be sharpened on Oil Stone.

	Per Dozen
No. 25—English File Steel, 8¾ in. Long; 2½ in. Blade, ⅝ in. Wide, Polished; Handle strongly fastened, Metal Ferrule. Half Dozen in a Box; Weight 2 Lbs. per Dozen	$3.00

MURIATIC ACID

Used as Soldering Flux on Galvanized Steel; also for Removing Stains from Brick Work, etc.

	Each
In 1 Gal. Stone Jugs	$1.90
In ½ Gal. Stone Jugs	1 00

Extra for Jugs

	Each
1 Gallon	$0.50
½ Gallon	.30

YELLOW PRUSSIATE OF POTASH

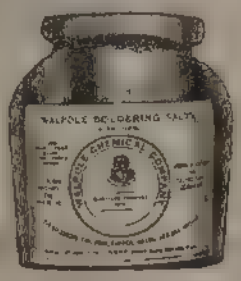
For Assaying Ore

	Per Pound
Commercial, Bulk, in Crystals	$0.75

CYANIDE OF POTASSIUM

	Per Pound
40 per cent Bulk, in Crystals; Used in Electro-Metallurgy and Photography	$1.20

SOLDERING SALTS



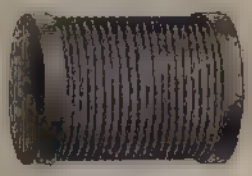
WALPOLE

Used in Soldering Tin, Galvanized Iron, Copper, Brass and other Metals; as a Flux to make Solder Flow.

	Per Dozen
2 Oz. Bottles	$2.00
½ Lb. Bottles	4.00
1 Lb. Bottles	7.00
	Each
5 Lb. Jars	$2.25

Open Stock

LEAD WIRE



DIAMOND LEAD WIRE

	Per Pound
Diam. ⅛ in.; Used principally by Marine Engineers for Testing Bearings; take cap off Journal, lay strips of Wire on Shaft, replace Cap and turn the Shafting; the Wire will show if Bearing is True and where it is otherwise; may also be used to fill up Inequalities of Bearings	$0.50

3 Lbs. on a Spool

PURE TIN

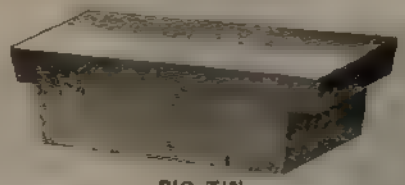
BANCA

High Grade; for filling Fusible Boiler Plugs, etc; also used as an Alloy in place of Block Tin

	Per Pound
In 5 Lb. Bars	$....

BAR TIN

	Per Pound
In 1½ Lb. Bars, Size 13½x1½x¾ in.	$....



PIG TIN

	Per Pound
About 110 Lbs. in a Pig	$..

Bar and Pig Tin are used in making Solder, Coating Metals for Rust prevention and as alloy with various softer metals

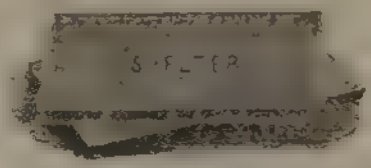
For Bar Lead and Pig Lead see Mining Department

ANTIMONY

Used in making Babbit Metal. Also for Hardening Type Metal and other Soft Compositions.

	Per Pound
Slabs of about 40 Lbs. Each	$....

SPELTER



For Brazing purposes, also called Slab Zinc.

	Per Pound
In 50 Lb. Slabs	$....

ROSIN

In Bulk

Used by Tinners, Roofers and Tinkers in Soldering Joints as it helps to make the Solder Flow, and by Varnish Makers as a Gum, in Cheap Varnishes.

	Per Pound
Best Quality Lump Rosin	$0 10

About 600 Lbs. in a Steel Hooped Barrel

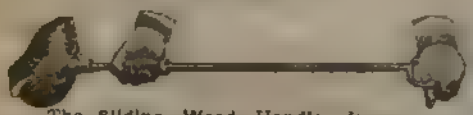
MORTARS AND PESTLES

CAST IRON, GOBLET SHAPE

Extra Finely Polished Inside, Painted Outside; Used by Chemists, Druggists, Housekeepers, Metallurgists, etc., for the Grinding and Compounding of Minerals, Drugs, Herbs, Spices, etc.

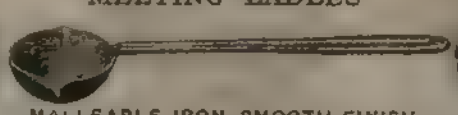
Capacity	1 Pt.	1 Qt.	2 Qt.	4 Qt.	8 Qt.
Diam. at Top, In.	4¾	5¾	7	8¾	11¼
Depth, In.	3	3½	4½	6	7
Height, In.	4⅞	4⅞	6	7	8⅝
Weight Pestle, Lbs.	1⅛	1¾	2½	2½	4½
Weight Both, Lbs.	3¾	7	10	18	38
Each	$0 80	1 00	1 60	3.00	6.00

MELTING LADLES



The Sliding Wood Handle dispenses with the use of Piece of Waste when Metal is ready to pour. All parts exposed to fire are of Cast Iron.

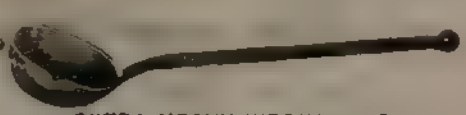
Length of Bowl, In.	8	10	12
Depth of Bowl, In.	2¾	3½	4
Length Handle Ft.	2½	2¾	2¾
Weight Lbs., Each	8	13	17
Each	$5.00	6.00	7.00



MALLEABLE IRON, SMOOTH FINISH

Bowl and Handle in One Piece. Ring in End for Hanging.

Diam. Bowl, In.	3	4	5	6
Depth Bowl, In.	1⅜	1½	1¾	2½
Length Handle, In.	12	12	14	15
Weight Doz., Lbs.	11	15	24	36
Per Dozen	$3 15	5 00	8.50	10 75



EXTRA HEAVY WROUGHT IRON

Made from Best Charcoal Iron; Iron Handle, Strongly Welded to Bowl.

Diam. Bowl, In.	6	7	8	10
Depth Bowl, In.	2	2⅜	2½	3½
Length Handle, In.	22	26	29	37
Weight Doz., Lbs.	48	66	96	144
Per Dozen	$36 00	42 00	54 00	102.00

Open Stock

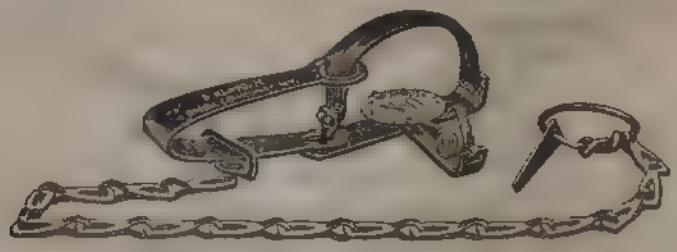
STEEL GAME TRAPS

GENUINE NEWHOUSE, HIGHEST GRADE

To the Professional Trapper, these would need no introduction; only the Best Crucible Steel Springs are used and the Stock is of a Special Mixture of Norway Iron. The Springs are put through three different tests and all other parts are tested and inspected before leaving factory. Guaranteed absolutely, against any defects. Newhouse Traps are fitted with American and Weldless Coil Chains.

No. 3 is a very Powerful Trap and will hold almost any game smaller than Bears or Timber Wolfs.

No. 4 is the regular form of Beaver Trap, a favorite with hunters and trappers in the Northwest and Canada; is also used extensively by western Stock Raisers in trapping Coyotes and small Wolves.



Single Spring, with Chain

	Per Dozen
No. N0 —Rat and Gopher, 3½ in. Spread of Jaws..... Weight 6½ Lbs. per Dozen	$4 25
No. N1 —Muskrat, Skunks, etc., 4 in Spread of Jaws..... Weight 9½ Lbs. per Dozen	5 00
No. N1½—Mink and Fox, 4⅝ in. Spread of Jaws..... Weight 14 Lbs. per Dozen	7.50

Double Spring, with Chain

	Per Dozen
No. N2—Fox, 4⅞ in. Spread of Jaws..... Weight 18 Lbs. per Dozen	$10.50
No. N3—Otter, 5½ in. Spread of Jaws..... Weight 28 Lbs. per Dozen	14.00
No. N4—Beaver, 6½ in. Spread of Jaws..... Weight 35 Lbs. per Dozen	16.50

OTTER TRAPS

Single Spring with Chain; Heavy Jaws, with Teeth

	Per Dozen
No. N2½—5 in. Spread of Jaws, Detachable Raised Plate, Sharp Teeth; Weight 24 Lbs. per Dozen.....	$16.50
No. N3½—6½ in. Spread of Jaws; for localities where Otter grows to unusual size, Weight 37½ Lbs per Dozen.....	18 50

Jaws have wide meeting Faces and will not mutilate the animal's leg

	Per Dozen
No. 91—Skunk, Mink, Muskrat, etc.; 5⅛ in Spread of Jaws; Weight 10½ Lbs. per Dozen.....	$6.00
No. 91½—Fox, Skunk, Mink, Coon, Woodchuck; 6¼ in. Spread of Jaws, Weight 16½ Lbs per Dozen	9.00

VICTOR

Although less expensive than the Newhouse, these are the best Traps to be had at the price. The Professional Trapper will use the Newhouse, but Farmers and Amateur Trappers who find a cheaper Trap answers their needs, are satisfied with the Victor

Victor Traps are supplied with Patent Steel Wire Chains.

VICTOR

	Per Dozen
No. V0 —Rat and Gopher, 3½ in. Spread of Jaws... Weight 5 Lbs. per Dozen	$4 25
No. V1 —Muskrats, Skunks, etc., 4 in. Spread of Jaws..... Weight 7 Lbs. per Dozen	5.00
No. V1½—Mink and Fox, 4⅝ in. Spread of Jaws.. Weight 11 Lbs. per Dozen	7 50

VICTOR

	Per Dozen
No V2—Fox, 4⅞ in Spread of Jaws.. Weight 14 Lbs. per Dozen	$10.50
No. V3 —Otter, 5½ in. Spread of Jaws..... Weight 21 Lbs. per Dozen	14.00
No. V4—Beaver, 6½ in Spread of Jaws..... Weight 25 Lbs. per Dozen	16 50

STEEL GAME TRAPS

GENUINE NEWHOUSE

Best Crucible Steel Springs
Special Mixture Norway Iron Stock

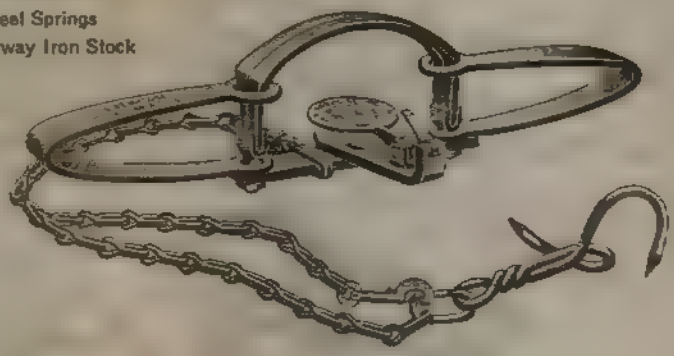
BEAVER TRAPS

Double Spring, with Chain

	Per Dozen
No. N14—6½ in. Spread of Jaws, Heavy Stiff Springs, Offset Jaws, with Teeth	$17 50

Weight 40 Lbs. per Dozen

The Offset Jaws allow the Springs to rise higher when the animal's leg is in the trap, and are furnished with teeth sufficiently close, to prevent the animal pulling his foot out.



WOLF TRAPS

Double Spring, with Chain and Drag

	Per Dozen
No. N4½—8 in. Spread of Jaws, Heavy Stiff Springs, With Pronged Drag, Extra Heavy Steel Swivel Chain 5 ft. Long, Heavy Snap; Warranted to Hold 2,000 Lbs. Resistance	$40 00

The most perfect and reliable Wolf Trap ever sold
Weight 96 Lbs. per Dozen

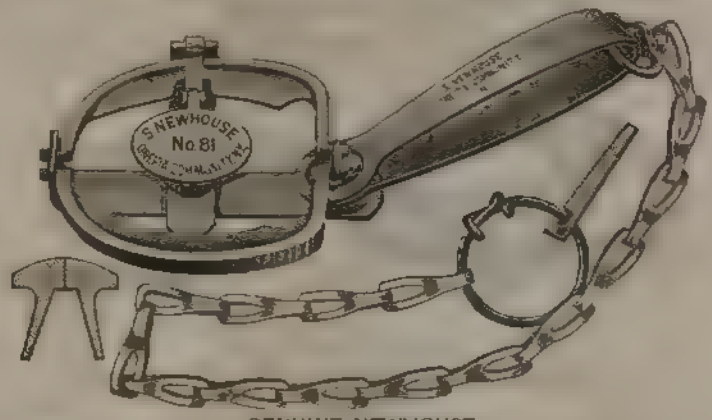
Open Stock

NEWHOUSE BEAR TRAPS

Double Spring, with Chain

	Per Dozen
No. N50—Small Bear, 9 in. Spread of Jaws.. Weight 135 Lbs. per Dozen	$85 00
No. N5—Common Black Bear, 11¾ in. Spread of Jaws.. Weight 228 Lbs. per Dozen	120 00
No. N6—Grizzly Bear, 16 in. Spread of Jaws.. Weight 504 Lbs. per Dozen	280 00

These Traps give absolute satisfaction in their respective fields; The largest size is the Strongest Trap Made, used to catch Lions, Tigers and the great Grizzly Bear of the Rocky Mountains an Animal has never been known to get out of it, when once caught.

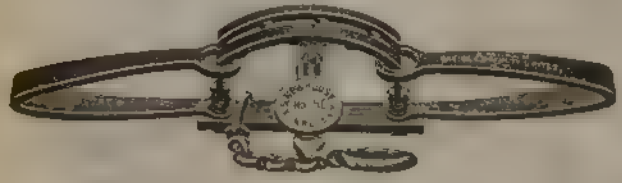


GENUINE NEWHOUSE

Occasionally animals free themselves from traps by gnawing their legs off just below the trap jaws, where the flesh is numb from pressure. Noting the webbed jaws as illustrated it is plain the animal can only gnaw off its leg at a point quite a distance below the meeting edges.

	Per Dozen
No. N81—For Muskrats, Skunks, etc., 4 in. spread of jaws, single spring; with chain; Weight 10 Lbs. per Dozen	$5 50

Open Stock



NEWHOUSE BEAR TRAPS

Offset Jaws; Double Spring, with Chain. The Offset Jaws allow the Spring to come up higher on the Bears foot, securing a stronger Grip and lessening the chances of breaking bones.

	Per Dozen
No. 150—Small Bear; ⅝ In. Offset, 9 In. spread of Jaws; Weight 135 Lbs. per Dozen	$85 00
No. 15—Common Black Bear; ¾ In. Offset, 11¾ In. spread of Jaws; Weight 220 Lbs. per Dozen	120.00

GAME TRAP SETTING CLAMPS

Malleable Iron; For Setting Traps, Use Two on a Trap

They dispense with the inconvenient and dangerous use of Levers. By applying One to each Spring and turning Thumb Screw the Springs are easily and quickly pressed down in place, so the Pan may be safely adjusted and set. Handle is so shaped that a bar may be used when Springs are extremely stiff.

	Per Single Dozen
No. 250—Opens 2½ in., For Traps, Nos. 2, 2½, 3, 4, 14	$3 60
No. 450—Opens 4½ in., For Traps, Nos. 5, 4½ and 5	6 60
No. 600—Opens 6 in. For Traps, No. 6 Grizzly Bear	12 00

Weights 2½, 9 and 21 Lbs. per Dozen, Respectively

HOW TRAPS ARE PACKED—Traps come in barrels and the following table shows the number of traps of each kind that a barrel holds.

Size of Trap	0	1	1½	2	2½	3	4	4½	5
Newhouse and Victor, Doz. in Bbl.	30 to 55	25 to 38	15 to 25	10 to 15	8 to 12	6 to 10	5 to 8	2½	1
Jump, Doz. in Bbl.	40 to 60	30 to 40	25 to 30	20 to 25	15 to 20	10 to 15	8 to 12		

STEVENS TARGET PISTOLS

DIAMOND SINGLE SHOT, 22 CAL.

Bored Especially for the 22 Long Rifle, Rim Fire Cartridge, but will also use Short and Long; Half Octagon Barrel to End of Frame, Balance Round, Blued Finish; Hinged Frame, Nickel Plated Finish; Black Walnut Stock.

With 6 in. Barrel	Each
No. 43A—With Globe Front and Peep Sights	$7 50
No. 43B—With Open Sights	7 50

Weight 8¾ oz. Each

With 10 in. Barrel	Each
No. 43D—With Globe Front and Peep Sights	10 00
No. 43E—With Open Sights	10 00

Weight 11 oz. Each

Unless Otherwise Specified, this Pistol will be sent with Globe and Peep Sights, as these are Standard.

OFF-HAND, SINGLE SHOT

Round Barrel with Octagon Breech, Blued Finish, Fitted with Sporting Rear and Bead Front Sights; Hinged Frame, Nickel Plated; Walnut Stock.

With 6 in. Barrel	Each
No. 35A—22 Long Rifle Caliber, R. F.	$12 00
No. 35B—25 Stevens Caliber, R. F.	12.00

Weight 22 Oz. Each

With 8 in. Barrel	
No. 35C—22 Long Rifle Caliber, R. F.	13 50

Weight 24 Oz. Each

TIP-UP SINGLE SHOT, 22 CAL.

Bored for 22 Short, Rim Fire Cartridge; a very handy and convenient Pistol to carry in the pocket; adapted to Target Shooting at short range from 15 to 20 yards; also suitable for Shooting Small Game, etc.

	Each
No. 41—3½ in. Barrel, Half Octagon to End of Frame, Balance Round, Blued Finish; Hinged Frame, Nickel Plated Finish; Black Walnut Stock; Open Sight	$5.00

Weight 7 Oz. Each

NEW MODEL PISTOL OR RIFLE, SINGLE SHOT, 22 CAL.

Most effective with the 22 Long Rifle, Rim Fire Cartridge, but will use also Short and Long; Octagon Barrel to End of Frame, Balance Round Blued Finish; Combination Globe Front and Combination Folding Rear Sights; Hinged Frame, Nickel Plated Finish; Black Walnut Stock, with Detachable Skeleton Rest, Nickel Plated

	Each
*No. 4010—10 in. Barrel, Weight 1¾ Lbs.	$12 50
*No. 4012—12 in. Barrel, Weight 2 Lbs.	13 50
*No. 4015—15 in. Barrel, Weight 2¼ Lbs.	14 50
*No. 4018—18 in. Barrel, Weight 2½ Lbs.	16 00

22 Caliber will also shoot Short and Long Cartridges

All the Above One in a Box, with Cleaning Rod

For Component Parts, see page 2979

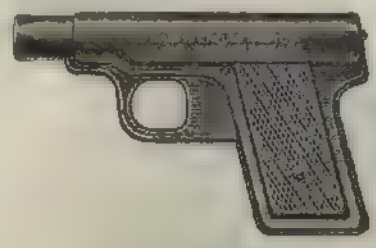
LIQUID PISTOLS

Looks like an Automatic Pistol of latest design, It has no Rubber Bulb to get out of order and will last much longer than the old style Liquid Pistol, It furnishes a lot of fun and amusement for Boys and Girls, or it can be made a very effective weapon against vicious men or animals if charged with ammonia or other strong solutions; Many Ladies carry one for this kind of protection; Very simple to load and discharge

DAISY REPEATER

	Per Dozen
No. 9—Five Shots can be fired in quick succession; Large Reservoir is filled by drawing back Top Slide; Polished Steel, Blued Finish; Length 5½ in.	$6.00

Weight 5¼ Lbs. per Dozen



DAISY SINGLE SHOT

	Per Dozen
No. 8—Made of Steel, Blued Finish; Length 5½ in.; Checkered Grip; Put together in a Strong Substantial Manner; Will throw a stream 25 feet	$3.00

Weight 4¼ Lbs. per Dozen

GUN SIGHTS

When Ordering Sights, always state Make, Model and Caliber of Rifle, also whether Straight or Pistol Grip

By means of a lever, this sight can be locked only in correct position for shooting; and when locked, can be freely carried through the woods without risk of being shifted. Has combined large and small aperture, for hunting and target practice. Point Blank Stop Pin, to prevent sight being turned down too low.

LYMAN COMBINATION, REAR PEEP

Each

No. 1A—Adapted to all Standard Rifles, except Winchester Model 1895; can be used with any Front Sight; Adjustable to any Range, by turning Knurled Sleeve $3 00

LYMAN RECEIVER, REAR PEEP

Made for rifles having a long firing bolt, which prevents the use of the Combination Rear Sight. Has Combined large and small aperture for hunting and target practice. Adjustable Lever on side allows the sight to be elevated for any range.

Each

No. 21—Made for Winchester Rifles Model 1886, 1892, 1894 and 1895; Marlin Rifles Model 1893 and 1895; Savage Rifles Model 1899; can be used with any Front Sight excepting the 30 U. S. and 303 British Calibers of Model 1895 Winchester; on which No. 26 Front Sight must be used to obtain Correct Elevation..... $3 50

Using the Crotch — Using the Straight Bar — Both leaves folded down

LYMAN LEAF REAR

One Leaf is a wide open V Crotch, the other is a bar with triangular Ivory Center. The Bar-leaf used with a Jack Front Sight is excellent for night shooting.

Each

No. 6—Adapted to all Standard Rifles that have a Rear Slot in Barrel..... ...$1 00

No. 6R—For Remington Auto-Loading Rifles..... 1.50

Used with Globe — Used with Ivory

LYMAN COMBINATION

Ivory and Globe Front

Each

No. 5—Can be used as either Globe or Ivory Sight; adapted to all Standard Rifles that have a Front Slot in Barrel; can be used with any Rear Sight $1.00

This Sight is the same as No. 1A excepting it is fitted with a cup disc, made expressly for match and gallery rifles; this disc can be removed leaving the sight with a large aperture suitable for hunting purposes. Has Lever Lock and Stop Pin

LYMAN COMBINATION REAR PEEP

Each

No. 2A—With Cup Disc; otherwise same as No. 1A.....$3 50

LYMAN IVORY BEAD FRONT

Each

No. 3—Adapted to all Standard Rifles that have a Front Slot in Barrel; can be used with any Rear Sight $1 00

LYMAN IVORY BEAD HUNTING FRONT

Each

No. 4—For all Standard Rifles that have a Front Slot in Barrel; can be used with any Rear Sight; particularly adapted for Hunting, as the Ivory is well protected by the metal $0 50

LYMAN JACK FRONT

Has large Ivory Bead, making it an Excellent Sight for Night Shooting.

Each

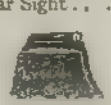
No. 20—Adapted to all Standard Rifles that have a Front Slot in Barrel; can be used with any Rear Sight $1.00

LYMAN SEMI-JACK FRONT

With Medium Size Ivory Bead, Making it Suitable for Either Day or Night Shooting

Each

No 28—Adapted to all Standard Rifles that have a Front Slot in Barrel, can be used with any Rear Sight.. . ..... $1 00



LYMAN IVORY BEAD FRONT

Each

No. 26—Made for Winchester Rifles and Carbines of Model 1895, Calibers 30 U. S. and 303 British, Winchester Carbines and Savage Featherweight Model 1899 Rifles.....$0.50

No. 32—Semi-Jack, Otherwise same as above ..... .50

Savage — Remington

LYMAN COMBINATION, REAR PEEP

With Special Base

Each

No. 1S—For Savage, Model 1899 Rifles and Carbines, without Lever Lock; otherwise same as 1A..... .. . $3 00

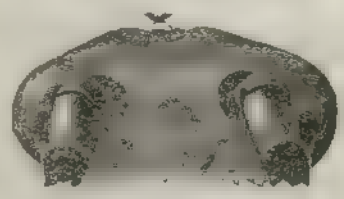
No. 1AR—For Remington Autoloading Rifles, otherwise same as No. 1A.....3 00

LYMAN IVORY BEAD FRONT

With Special Base

Each

No. 3R—Made for Remington Autoloading Rifles $1 00



LYMAN IVORY SHOT GUN

Cut shows gun with correct elevation but out of line. This would not be discovered unless using sights. Adapted to any Shot Gun.

Per Set

No. 9—Ivory Bead Front and Rear Sights, with Reamer.....$1.00

KING TRIPLE BEAD FRONT

Revolving Center has Ivory, Gold and Black Beads, thus making this Sight suitable for all kinds of Weather and any condition of Light.

Each

No. K10—Adapted to all Standard Rifles that have a Front Slot in Barrel; can be used with any Rear Sight.....$1 50

SHEARD GOLD HUNTING OR TARGET, FRONT

Each

No. S20—Made with Long Gold and Copper Alloy Bead; adapted to all Standard Rifles that have a Front Slot in Barrel; can be used with any Rear Sight. $1 50

LYMAN SLOT BLANKS

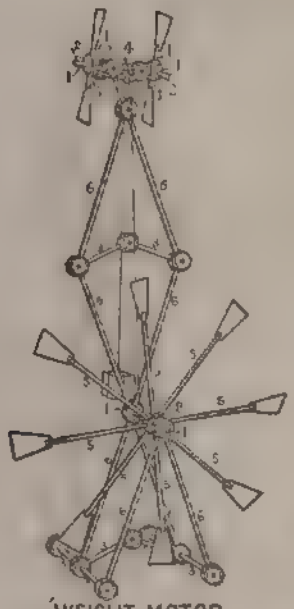
Each

No. 12—Made to fill in Rear Slot when Regular Sight has been removed ....$ 025

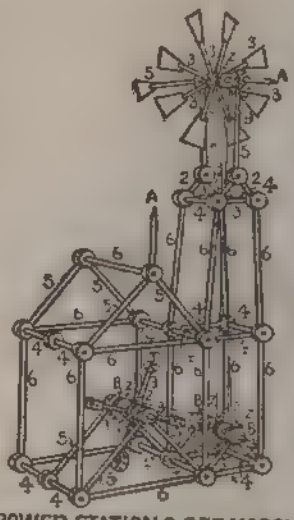
Complete Directions for Putting on and Adjusting are Sent with Every Sight

TINKERTOY

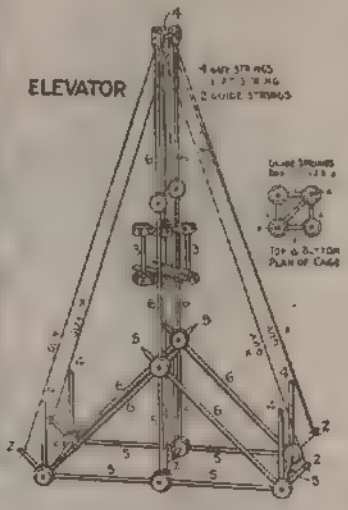
These Diagrams show only a few of the hundreds of different and interesting models which can be made from one of these Sets

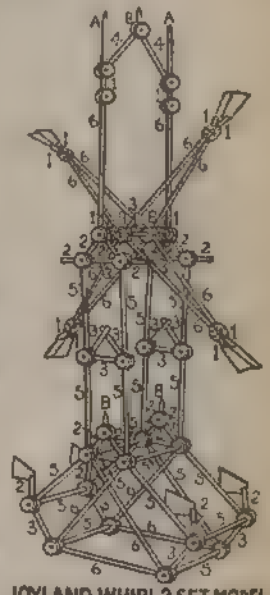


WEIGHT MOTOR

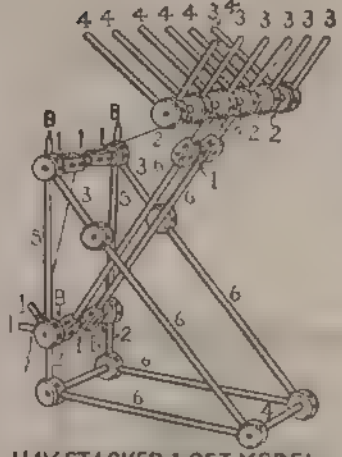


POWER STATION 2 SET MODEL

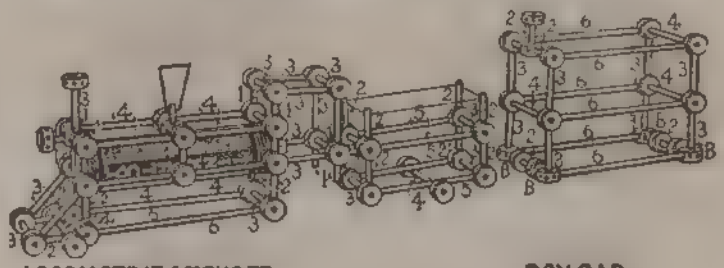




JOYLAND WHIRL 2 SET MODEL

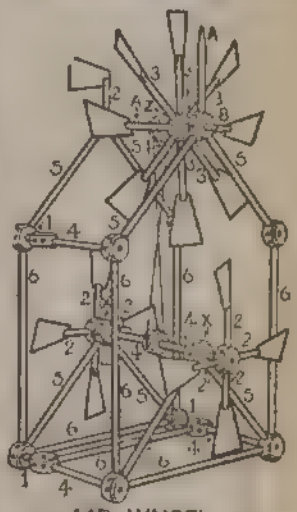


HAY STACKER 1 SET MODEL



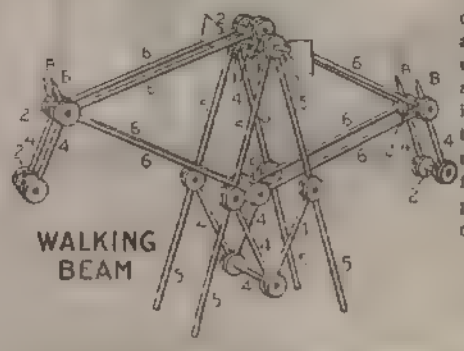
LOCOMOTIVE & TENDER
2 SET MODEL

BOX CAR
1 SET MODEL

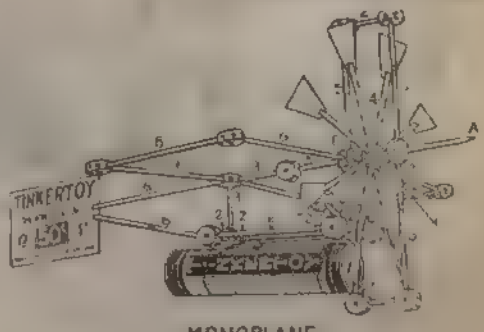


AIR WHEEL
WITH REVERSE ROTORS

The Toy that has broken all world's records for sales during the past. Each Set of Tinkertoy consists of 73 smooth, round rods and spool—all hardwood clean and white, without paint or varnish, that can be taken apart and put together to form a thousand different marvelous motion figures; a new Toy for every day in the year, all for the cost of one. Complete and easy instructions packed with each Toy; Tinkertoy Book "B", consisting of wonderful new models, made with two sets and more, is furnished free through dealers to two set purchasers or present owners of Tinkertoys on the purchase of a second set.



WALKING
BEAM



MONOPLANE

Per Dozen Sets

No. 1075 Set consists of 73 Pieces of Hardwood, smoothly finished, the lengths of the Rods vary to correctly form any figure desired $8 00

One Dozen in a Case; Weight 13½ Lbs. per Dozen Sets

Tinkertoys are packed in Orgue Tubular Boxes ready for purchasers to stamp, address and mail at one parcel rate. No wrapping required. Parcel post rates to parts of the country as the following: 150 miles, 5 cents; 300 miles, 6 cents; 600 miles, 7 cents, 1000 miles, 8 cents; 1400 miles, 9 cents; 1800 miles, 11 cents; all over 1800 miles and foreign, 12 cents.

STICK CRAFT BUILDERS

These Diagrams show only a few of the hundreds of different and interesting Models which can be made from one of these Sets

The Artistic Builder

Teaches the Boy or Girl to build and trains the mind in the best possible manner along Artistic and Mechanical Lines; the Sticks can be placed in the Spools at any angle or position, permitting a wide range in construction. Models of Buildings Furniture, Bridges, Machines, Vehicles, etc, can be built in many designs, Letters and Numerals can be formed, and many original Creations will suggest themselves to the keen mind of the Boy or Girl.

Per Dozen Sets

Set No. 1300—Consists of 64 Pieces. 16 Spools and 48 Flat Sticks of seven different lengths, proportioned so as to obtain the most artistic results in building. To make Motion Toys, place a Nail or Wire through the hole in the Spool..... .... $1 60

One Set in a Box; Weight 4½ Lbs. per Dozen Sets

TINKERPINS

A GAME OF SKILL

First construct and then play the game that whiles the hours away Always lots of fun Entirely new principles; Suspense in every shot Becomes more and more interesting as skill develops, One of the biggest and best 50 cent games ever produced, Packed away flat in half a minute; Can be assembled in two minutes.

Per Dozen

No. 1301 Frame Work of Wood 4 ft. 8 in Long, Set-Up, Can be played on any table Grooved Parallel Rails contain Ten Pins at each end Centrifugal Traveler, with Automatic Retard spins forward and backward Automatic Registration of Count, and Automatic Set-Up of Pins for opponent; Size of Box 2¼ in. Square, Length 27 in.....$8.00

One Dozen in a Carton; Weight 8 Lbs. per Set

TROLLEY STORE OR SHELF LADDERS

For Shelving with narrow base ledge or none at all; a wide counter at bottom forces ladder too far away from shelving. Trolley ladders are easiest to mount, both hands are free to carry goods up or down give better access to the goods on the shelves, do not interfere with slightly projecting boxes, etc.

RELIABLE ROUND TRACK TROLLEY

The Track is double-tube, two round ⅞ in. steel rails suspended by patent hangers; on the same principle as the Reliable Barn, Parlor and Fire Door track which is so satisfactory.

The Ladder is made of selected kiln dried lumber, rubbed, oiled, filled and varnished; the sides are 3½ in. wide, the steps are 4 in. deep, the ladder is 12 in. wide inside.

Each Step is mortised into the side pieces and fastened with four screws; three stay bolts through the sides give additional strength; a 9 in. extra deep top shelf will be furnished at no additional cost, if ordered.

The Trolley is self-adjusting; malleable iron frame, with four brass bushed, roller-bearing fibre tread wheels; practically noiseless and very durable; space the hangers 24 to 30 in. apart.

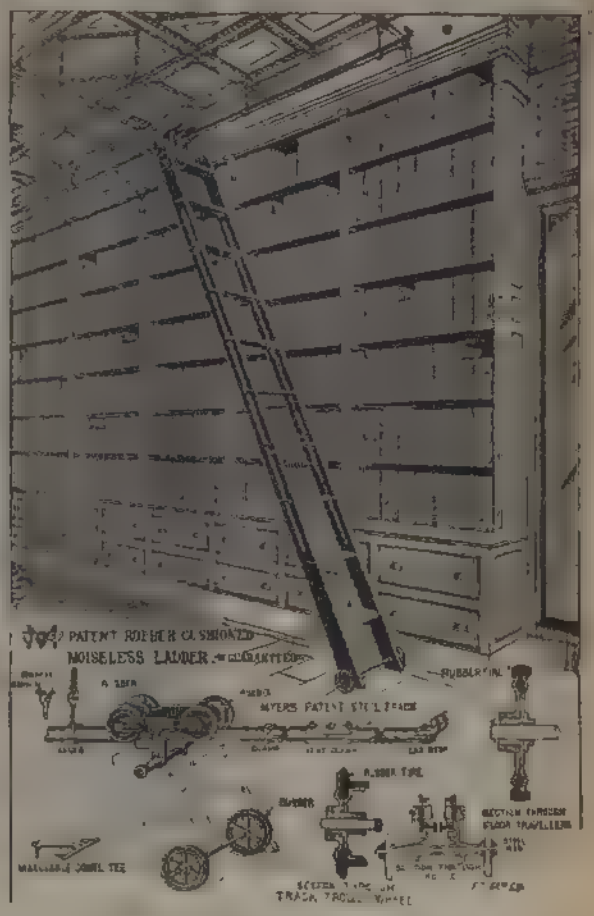
The Floor Travelers, attached to both legs, are 3½ in. diameter, roller-bearing and rubber tired.

F. O. B. Danville, Ill.

No. 95—Solid Oak Ladder, Fitted Complete.....$20 00
Figure Weight at 4 Lbs. per Foot

Per Set
No. 96—Upper and Lower Fixtures Only, as Regularly Furnished for 12 in. Ladder; Weight 15 Lbs. per Set.....$9.00

Per Foot
No. 11L—Double Tubular Track, with Brackets $0.25
Weight 1½ Lbs. per Foot



MYERS CUSHION TIRED TROLLEY

The Track is a double angle steel rail, either suspended by jointed or rigid hangers or screwed close to ceiling with flanged plates; thus leveling an uneven surface without any blocking, bridging or other difficulty.

The Ladder is constructed of strictly clear Georgia Pine, nicely finished, filled and varnished; the sides are 6 in. wide, open paneled; the steps are 5 in. deep, supported by special malleable tees; the ladder is 12 in. wide.

The Trolley is self-adjusting, made of malleable iron, with turned steel bearings; 3 in. anti-rattler wheels, lathe finished and rubber tired.

The Floor Travelers are 5 in. diameter, with rubber cushion tires; the steel axle runs through both legs.

The rubber tread of both hangers and floor travelers makes this ladder almost noiseless.

F. O. B. Ashland, Ohio

Each
Myers Ladder, Fitted Complete..... ..$20.00
Weight 40 to 50 Lbs., according to Length

Per Foot
Myers Track, Complete with Hangers..... ....$0.30
Weight 2 Lbs. per Foot

In ordering, give the height of ceiling and length of track wanted. If height varies, give measurements at ends and center of run

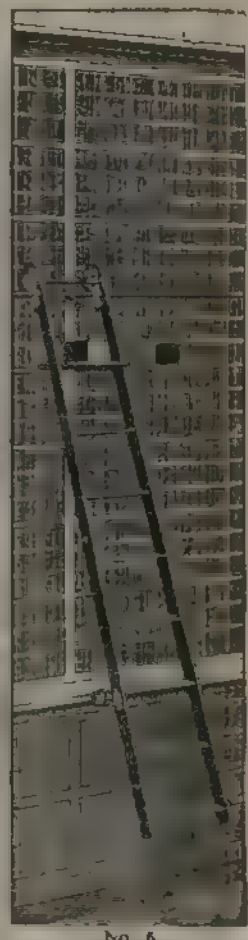
MILBRADT ROLLING STORE OR SHELF LADDERS

For Hardware, Shoe, Drug, Grocery and General Stores, Jobbing Houses, Large Office Vaults, Libraries, Book Stores, Factories, Machine Shops and any place where High Shelving is to be easily, quickly and safely reached

No. 12

No. 1

No. 2



No. 5

For all kinds of High Shelving. Where the base shelf is narrow, the Roller Arms can be made longer, or placed at bottom to run against the base. They are constructed to take up the least possible space and are noiseless, neat and durable, running so easily that a light push will propel the Ladder the length of an ordinary store. **Side Ladders** are 17 in. Wide, Sides 2½ in. Wide, Top Shelf 7⅛ in. Deep, Steps 3½ in. Deep. **Trolley Ladders** are 13½ in. Wide, Sides 3½ in. Wide, Steps 4¼ in. Deep.

Widths given are at the Top and increase ¼ in. at every step toward the Bottom.

	Each
No. 12—Trolley Ladder, Oak, all Iron Parts Aluminum Bronzed, Runs on Steel Track Fastened to Ceiling, Used Where the Base Ledge is not Wide; is Easy to Mount, with Both Hands Free to Carry Goods	$12.50
No. 1—Bent Ladder, Oak, all Iron Parts Aluminum Bronzed, Runs Close to Wide Base Shelf, Rubber Rollers, Preferable for all Shelving with Wide Base.	18 75
No. 2—Bent Ladder, Oak, Legs Supporting Weight on Floor Wheels, Relieving Shelving, when it is not Substantial Enough, Wheels at Top Side Up and Down to Equalize Unevenness of Floor, Takes Wood Track, Used Where Shelving is not Very Strong or Does not Run Down to Floor; all Weight Rests on Floor Surface.	13.75
No. 5—Straight Ladder, Oak, all Iron Parts Aluminum Bronzed, Runs Close to Wide Base Shelf, Rubber Rollers, is Easily Climbed, but the Bottom Projects too Far for Very Narrow Aisles	12.50

TRACKS FOR ABOVE LADDERS

	Per Foot
No. 12T—Trolley Track for No. 12 Ladder, Including Brackets and Lag Screws	$0.25
No. 1T—Hardwood Track for No. 1 or No. 5 Ladder, Including Screws	12½
No. 2T—Hardwood Track for No. 2 Ladder, Including Screws	.19
No. 5T—Steel Track for No. 1 or No. 5 Ladder, 1 in. Diam. Outside, Aluminum Bronzed, Regular Weight, for Brackets 4 ft. or Less Apart	
No. 15T—Extra Strong Steel Track for No. 1 or No. 5 Ladder, 1 in. Diam. Outside, Aluminum Bronzed, for Brackets up to 5½ ft. Apart	.25
No. 5B—BRACKETS for Steel Track.	$0 25

EXTRAS FOR NICKEL PLATING

Per Ladder	Per Foot	Each
For Nickel Plated Trimmings, Add	For Nickel Plated Track, Add $0 12½	For Nickel Plated Brackets, Add $0.12½

All F. O. B. St. Paul. Each Ladder is "Made to Order"

Average Weight of Ladders, 50 Lbs. Each; Steel Track, ¾ Lb.; Wood Track, ½ Lb. per Foot

HOW TO ORDER

Trolley Ladders: Give height from floor to ceiling.

Bent or Straight Ladders: Give height from floor to top of base or corner shelf, width of base shelf to front edge of uprights or partition of shelving, height from base shelf to top of shelf or cornice on which the track is to be fastened.

In all cases give exact length of Track required, as well as number of Brackets wanted. (To make a solid track, brackets should be **four feet or less apart**). **For further information, send for Special Catalog.**

The Ladders are all finished in natural wood, but will be furnished any color to suit store if order is so given, or without finish, thereby making it more certain for you to match color of shelving. Give any additional information you can that will facilitate the production of just what you want and ought to have, sketch, etc. The track should run three or four feet below the top of the shelving.

TURNER GASOLINE BLOW TORCHES

Automatic Spring Valve Pump, Non-Leaking Filler Plug, Improved Pump Cap and Former. The Burner is closed under Generator Type. This is the highest grade Torch of its type.

	Each
No. 202—Capacity about One Quart; Height Over all 9¼ in., Diam. 4 in.; Consumes about ½ Pint per Hour	$8 00
Shipping Weight 5½ Lbs. Each	
No. 302—Capacity about One Pint; Height Over all 8 in., Diam. 3⅛ in., Consumes about ½ Pint per Hour	$7 20
Shipping Weight 4 Lbs. Each	

Polished, Seamless Brass Tank and Handle; Burner is made of Special Metal to withstand heat. Brass Air Pump, Needle Point Valve.

	Each
No. 215—Capacity about One Quart; Height Over all 11 in., Diam. 5¾ in., Consumes about ½ Pint per Hour	$6 00
Shipping Weight 5¾ Lbs. Each	
No. 315—Capacity about One Pint; Height Over all 8⅞ in., Diam. 4¾ in., Consumes about ½ Pint per Hour	$5 60
Shipping Weight 4½ Lbs. Each	

DOUBLE JET TORCHES

The Burner is mounted on a Swivel and can be turned on either side of the Tank, the Double Jet produces a hot pointed blue flame of over 3000 degrees Fahrenheit; Specially recommended for light Brazing, Annealing light Metal, Drawing Temper on Tools and Paint Burning; Non-Leaking Filler Plug, Improved Pump Cap and Former; Made of Heavy Gauge Polished Brass.

	Each
No. 93—Capacity about One Quart; Height Over-all 10¾ in., Diam. 4 in.; Consumes about ¾ Pint per Hour; Net Weight 3 Lbs. Each	$10.25
Shipping Weight 5 Lbs. Each	

AUTO TORCHES

For Outdoor or Inside Use; Especially Adapted to use of Repair Men, Linemen, Electricians, Plumbers, and all Mechanics, the Attachment to prevent tipping is so formed that when sprung into use it cannot close accidently or be broken off; Non Leaking Filler Plug, Automatic Spring Valve Pump, Improved Pump Cap and Former.

	Each
No. 418—Capacity about One Pint; Height Over-all 8½ in., Diam. 1¾ in.; Consumes about ¼ Pint per Hour; Net Weight 2¾ Lbs. Each	$8 80
Shipping Weight 3⅛ Lbs. Each	

CLAYTON & LAMBERT

Polished, Seamless Brass Tank and Handle; Burner is made of Special Burner Metal; Brass Air Pump, Needle Point Valve, Wheel Regulator. The Burner which is a strong Generator produces an intensely hot blue needle point flame, which will give the best of service, whether used indoors, or outside in a strong wind.

ONE QUART SIZE

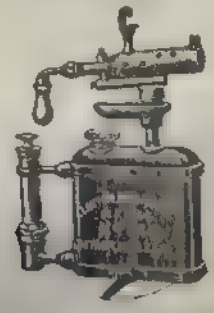
	Each
No. 32—With Hook and Support for holding Soldering Coppers; Diameter 5¾ in., Height 11 in.	$8.00
No. 31—Without Hook and Support, Otherwise same as above	7.60

One in a Box; Weight 5 Lbs. Each

ONE PINT SIZE

	Each
No. 38—With Hook and Support for holding Soldering Coppers; Diameter 4¾ in., Height 8⅞ in.	$7 20
No. 37—Without Hook and Support, Otherwise same as above	6.80

One in a Box; Weight 3¾ Lbs. Each



AUTOMOBILE BLOW TORCHES

Capacity One Pint

Polished, Seamless Brass Tank; Burner is made of Special Burner Metal; Reinforced Tank; Combination Brass Air Pump and Handle; Folding feet, which lie close to the Tank when carrying

	Each
No. 48—With Hook and Support for holding Soldering Coppers; Size of Base 5x1⅞ in.; Height 6½ in.	$9.20
Weight 5¼ Lbs. Each	
No. 47—Without Hook and Support, otherwise same as above; Size 5x1⅞ in.; Height 5 in.	8.80
Weight 4½ Lbs. Each	

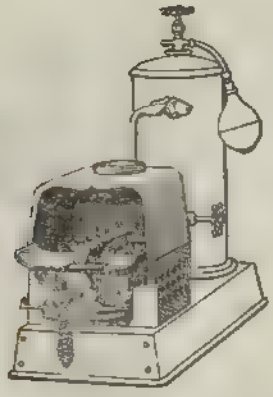
AUTOMOBILE BLOW TORCHES

A Full Quart Size Torch at an extremely moderate price. The Pump is contained in the Handle and has a Single Spring Check Valve which automatically closes off the air after each stroke of the Pump Plunger.

While not so powerful as the higher priced Torches it will give excellent results for medium and ordinary work. Just the thing for amateur work or use around a farm. Has a Detachable Soldering Copper Holder, a great convenience when used for repair work.

	Each
No. 120—Full Quart Size, Diam. About 5½ in.	$6.00
Weight 4 Lbs. Each	
No. 122—Pint Size, Diam. About 4½ in., otherwise same as above	5 60
Weight 3 Lbs. Each	

GASOLINE SOLDERING FURNACES



GEM No. 3

The Burner emits a 4 inch Flame for each Soldering Copper; Distributes Flame full length of Coppers.

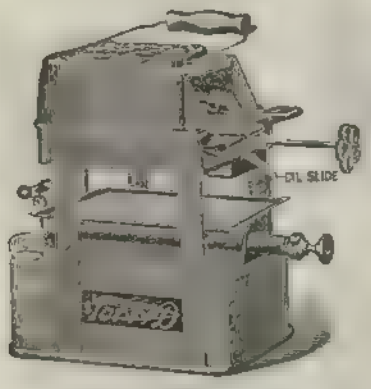
Each

No. 3—Tank Capacity 3 Quarts, Height 16 in.; Heavy Sheet Steel Base, Size 21x7 in.; Fire Proof Copper Reservoir, Has Regulating Valve; Black Rubber Bulb and Stem, Malleable Handle, Covered with Enameled Wood.....$12.00

One in a Crate; Weight 22 Lbs.

EXTRA PARTS FOR GEM FURNACES

	Each
Rubber Bulb and Stem	$1 20
Generator Valve	1 60



TORRID

Burners throw Flame from Sides to Center, concentrating all the Heat upon the Coppers; Has 10 in. Set Air Pump, Cast Metal Turret Hood, Removable Cover; Flame can be run very low.

Each

No. 10T—Tank Capacity 1 Gallon; Height 12 in., Size Base 10x16½ in.; Galvanized, 18 Gauge Sheet, Steel Tank; Aluminum Finish; Cast Metal Furnace; Will Heat 3 to 12 Lb. Coppers Indoors or on Roof; Burns ¾ Pint of Oil per Hour if Full Blast $10.00

One in a Box; Weight 22 Lbs

The Burner has Two Heating Surfaces; the Gas is Superheated before it is burned and gives an intensely hot blue flame burning from each side to the center; Noiseless, Smokeless and Odorless; Heavy, Galvanized Iron Tank and Top Section

Each

No. 71—Capacity 7 Pints; A Pot of Lead can be Melted and a Pair of 12 Lb. Coppers heated at the same time; Weight 15 Lbs. Each $13 60

No. 72—Capacity 5 Pints; A Pot of Lead can be Melted and a Pair of 8 Lb. Coppers heated at the same time; Weight 14½ Lbs. Each 10.40

One in a Crate

Galvanized Steel Tank, Strongly Braced; Cast Iron Bottom Rim; Japanned Steel Hood with Bail; the Burner is Outside the Hood and does not clog nor get eaten out by drippings; Removing the Top Section Converts the Furnace into a Blow Torch.

For Tinners or Cornice Workers

Each

No. 1—Tank Capacity 7 Pints, 9½ in. Diam., 3¾ in. High; Height Over-all 12½ in.; Also has Larger Burner than Size 5; Net Weight 9½ Lbs.....$13.60

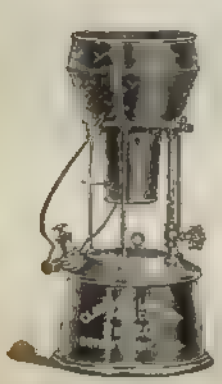
One in a Box; Weight 14 Lbs. Boxed

Tinners' Special

Each

No. 5—Tank Capacity 5 Pints, 8½ in. Diam., 3¾ in. High; Height Over-all 12 in.; Easily Carried About; Net Weight 8¼ Lbs. $10 40

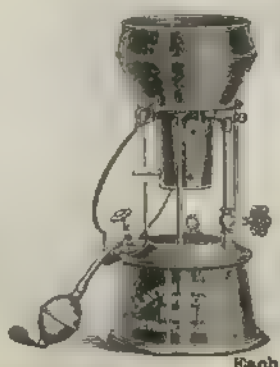
One in a Box; Weight 12 Lbs. Boxed



GASOLINE, COIL FIRE POTS

Galvanized Steel Tank, with Galvanized Cast Top, and Galvanized Cast Protecting Ring at Bottom; Black Sheet Steel Shield, Heavy Pipe Coil, Special Steel Burner; Needle Point Valve controls Fire perfectly and fits tightly. Large and Powerful Generator produces a strong flow of Gas and a Pure Blue, Intensely Hot Flame.

Tank Capacity 4 Quarts, Diameter of Base, 8½ in., Height 18 in.



Each

No. 20—With Improved Brass Air Pump $6.80

No. 10—With Rubber Bulb and Tube Pump $6.00

One in a Box; Weight 13 Lbs. Each

MELTING POTS

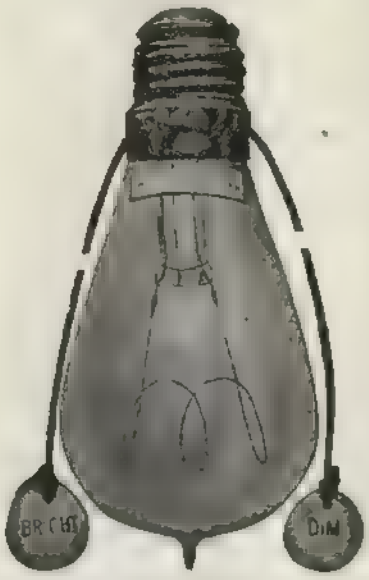
CLAYTON & LAMBERT

Used in connection with Soldering Furnaces to melt Solder, Lead, Tin or Other Metals

Diameter, In.	5	6
Capacity, Pints	1	2
Weight Each, Lbs.	2½	3¼
Each	$0.50	.70

Open Stock

TURN DOWN ELECTRIC LAMPS



ECONOMICAL TURN DOWN LAMPS

Have two light giving filaments,—one of the usual size, giving 16 C P., the other, very small for 1 C P Fits any style of fixture, working upright, downward or horizontally. When turned to Dim, will save 80% current and last as long as four ordinary lamps. A great convenience in Bed, Bath or Sick Rooms

TURN BULB, CARBON
A Slight Twist Changes the Carbon

	Each
No. 360A—104 Volt, Edison Base	$0 60
No. 360B—110 Volt, Edison Base	.60
No. 360C—115 Volt, Edison Base	.60

STRING PULL, CARBON
With 5 Inch Strings and ¾ Inch Celluloid Discs

	Each
No 360D—104 Volt, Edison Base	$0 60
No. 360E—110 Volt, Edison Base	.60
No. 360G—115 Volt, Edison Base	60

STRING PULL MAZDA

	Each
No. 360DD—104 Volt, Edison Base	$1 25
No. 360EE—110 Volt, Edison Base	1 25
No. 360GG—115 Volt, Edison Base	1 25

250 Lamps in a Standard Package; Weight 50 Lbs.
Other Voltages than above can be shipped from Factory

50 Lamps in a Standard Package
Weight 25 Lbs.

ECONOMICAL LONG CORD TURN-DOWN LAMPS

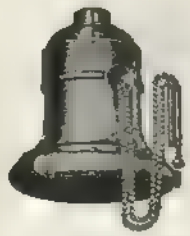
Very similar in operation to Turn Bulb and String Pull Lamps (Shown above), having two Light Giving Filaments of 16 and 1 C. P. respectively. This Lamp has a heavily Insulated, Triple Strand Lamp Cord with a Brass Pull Chain Switch at the end, to control the Light; it can be turned on or off or made bright or dim from any part of the room; Cord and Switch are Detachable and are Indestructible.

	Per Set
104 Volts, Edison Base	
No. 360H—With 3 ft. Cord	$2 00
No. 360K—With 6 ft. Cord	2 30
No. 360L—With 10 ft. Cord	2 70
110 Volts, Edison Base	
No. 360M—With 3 ft. Cord	$2 00
No. 360N—With 6 ft. Cord	2 30
No. 360P—With 10 ft. Cord	2 70
115 Volts, Edison Base	
No. 360R—With 3 ft. Cord	$2 00
No. 360S—With 6 ft. Cord	2.30
No. 360T—With 10 ft. Cord	2.70

Cord and Socket and Lamp in Separate Cartons; Wt. 6 Oz. per Set

DIM-A-LITE AND DIMMING SOCKETS

Dim-a-Lite



Dimming Socket

A Turn-Down Attachment for an Incandescent Lamp, makes any Lamp a Turn-Down Lamp; Perfectly suitable for metal filament lamps; Approved by Fire Underwriters; Produces five changes of light—full, dim, low, night light and out.

Dim-a-Lite fits any Standard Edison Socket

	Each
No. 360V—Gun Metal Finish; 110 Volts	$1 10
No. 360W—Brush Brass Finish; 110 Volts	1 10
No. 360X—Brush Brass Finish; 220 Volts	1 20

One Dozen on a Display Card; Weight 4 Lbs. per Dozen

Dimming Socket takes the place of Regular Socket and Dim-a-Lite

	Each
No. 360Y—Brush Brass Finish, 110 Volts, with Shade Holder	$1 50

One in a Box; Weight 5 Oz. Each

All Above, 100 in a Standard Package

UPRIGHT GAS MANTLES

Our New Line Includes Mantles for every purpose, both for Natural Gas and for Gasoline as well as for the numerous Kerosene Gas Lamps now manufactured

Per Doz.

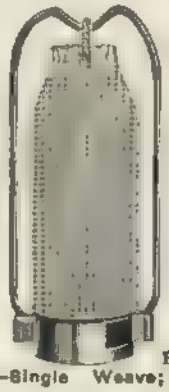
No. 1—Heavy Double Weave; 100 Candle Power; Double Wire, protected with Magnesia; 4 in. High.....$5.00

Per Doz.

No. 2—Single Weave; 100 Candle Power; Double Wire, protected with Magnesia; 4 in. High $4.00

Per Doz.

No. 3—Single Weave; 100 Candle Power; Double Wire, protected with Fire Clay; 4 in. High $2.50



Per Doz.

No. 4—Single Weave; 100 Candle Power, Double Wire; 4 in. High.....$1.50

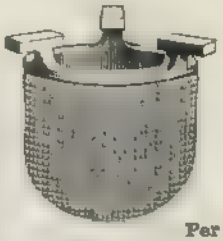
INVERTED GAS MANTLES

Per Doz.

No. 11—Heavy Double Star Weave; Interwoven; 100 Candle Power; Magnesia Ring; 2 in. High.....$5.00

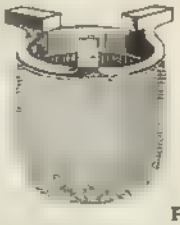
Per Doz.

No. 21—Single Weave; 6 Cord Interwoven; 100 Candle Power; Magnesia Ring; 2 in. High $4.00



Per Doz.

No. 31—Fancy Weave; 100 Candle Power; Magnesia Ring; 2 in. High.....$2.50



Per Doz.

No. 41—Single Weave; 100 Candle Power; Magnesia Ring; 2 in. High.....$1.50

HIGH PRESSURE GASOLINE MANTLES

No. 52

For Overhead Generator Pressure Lamps

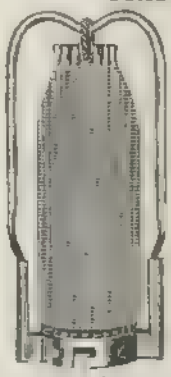
No. 42

Per Dozen

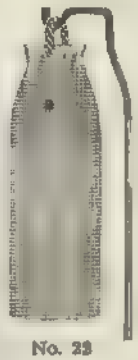
No. 52—Single Weave; 750 Candle Power; Double Wire; 5¾ in. High $4.50

No. 42—Single Weave; 750 Candle Power; Single Wire; 5¾ in. High 4.00

GRAVITY GASOLINE MANTLES



No. 32



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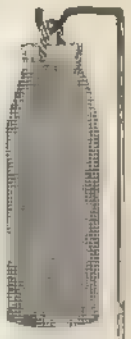


No. 12

Per Dozen

No. 32—Single Weave; 100 Candle Power; Double Wire, protected; 4¼ in. High $4.50

No. 22—Single Weave; 6 Cord Loop; 100 Candle Power; Single Wire, 4¼ in. High 3.00

No. 12—Single Weave; 100 Candle Power, Single Wire; 4¼ in. High 1.50

INVERTED RAG MANTLES

Per Doz.

No. 62—For Tube and Hollow Wire Gasoline Gas Systems; 3 in. Long $1.50

Per Doz.

No. 72—For all Gasoline Table Lamps; 2 in. Long.....$1.50

KEROSENE LAMP MANTLES

Per Doz.

No. 13—For Center Draft Lamps such as Alladin, Beacon, Sunburst, Britelight and others; Double Wire, protected, 5½ in. High; 100 Candle Power $4.50

Per Doz.

No. 23—For all Lamps using Single Wire Mantle, such as Welsbach, Kronos, Practicus and others, Single Wire; 100 Candle Power; 3 in. High $4.00

All Above One in a Tube; One Dozen in a Carton

BRAZED STEEL TORCHES

Made of heavy Sheet Steel, Brazed with hard brass Spelter Solder which will not melt at a welding heat. Practically indestructible and guaranteed not to leak; Use Candle Wicking and Kerosene

ONE SPOUT

Per Dozen

No. 91—2 Quart, One Spout; Otherwise same as No. 93 . . . $17 00

Weight 19 Lbs. per Dozen

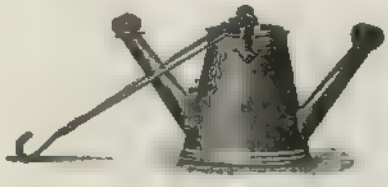
ONE SPOUT

Per Dozen

No. 92—1 Quart, One Spout; Size 6x6 in., Will Burn about 8 Hours with One Filling; Heavy Steel, Brazed; Wrought Iron Top; Can be Carried in Hand, and will not fall over if set down. $12 00

Weight 15 Lbs. per Dozen

Open Stock



TWO SPOUT

Per Dozen

No. 93—2 Quart, Two Spout, Size 6x6½ in.; Will Burn about 9 Hours with One Filling; Heavy Steel Brazed; Wrought Iron Top; Hang by Hook on Nail, Tree Limb, Post, etc.; Cover is Chained to Torch $18 00

Weight 21 Lbs. per Dozen

CANDLES

MINING

Per Box of 240

No. 71—Granite, 14 oz. 6's (6 weigh 14 oz.); Size 9½x1¼ in. $6 00

Weight 40 Lbs. per Case

SHOP OR PLUMBERS'

Per Box of 200

No. 73—Size 5x1¼ in., 5 per Lb . . . $8 50

200 in a Box; Weight 40 Lbs. per Box

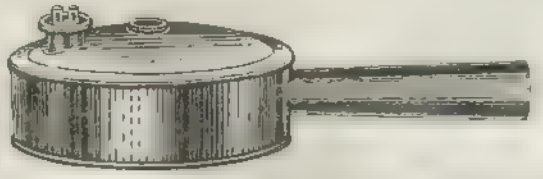
TIN TORCHES

Hand Made in our own Shops, of Heavy Tin, with Can Screw Fillers and Spouts, 1 in. Tube for Candle Wicking; Use Kerosene or Torch Oil

1 SPOUT SWINGING			2 SPOUT SWINGING		
Nos.	83	84	Nos.	85	86
Quarts.	1	2	Quarts.	1	2
Size Can, In.	4x4¼	5x5⅜	Size Can, In	4x4¼	5x5⅜
Burns, Hours, About	8	16	Burns, Hours, About	4½	9
Weight Dozen, Lbs.	6	8	Weight Dozen, Lbs.	6	7½
Per Dozen	$4 00	5.00	Per Dozen	$5.00	6.00

Open Stock

ENGINEER'S HAND TORCHES



Per Dozen

No. 87—1 Pint, Malleable Iron; Size 13x2 in., Small Tube at Top for Candle Wicking, Supplied with Bracket Holder Light and Absolutely Oil Tight; will burn 5 Hours with One Filling . $14 00

Weight 36 Lbs. per Dozen

Per Dozen

No. 89—1 Pint, Oval IXX Tin; Two ⅛ in. Tubes for Candle Wicking; Brass Screw Filler; Burns 7 to 8 Hours with One Filling; can be used with Wood Handle inserted in the Hollow Tin Sock ts desired, a No. 1 Flat Wick Burner may be used instead of Round Candle Wick Socket. $10.00

Weight 2 Lbs. per Dozen

Open Stock

BRUSH BURNING TORCHES

MINNESOTA STATE FORESTRY APPROVED PATTERN

Used for Lighting Fires in Brush Piles and Refuse, Burns Kerosene; Wick made of Candle Wicking

Each

No. 99—Length 43 in. $1.00

Weight 6 Lbs. Each

LADDER ROUNDS

HICKORY

Nicely Turned from Heavy Second Growth Hickory, All Sound Stock

Per 100

No. 16—Length 16 in.; 1⅛ in. Diam., Turned to 1 in. at Ends. $4.50

250 in a Crate; Weight 175 Lbs. per Crate

VANGUARD WIND SHIELDS

Entire Page, Not Carried in Stock Shipped Direct from Michigan Factory

DE LUXE COWL TYPE

For 1914 Ford Cars; Rain Vision, Clear View and Ventilating Style; it adds greatly to the appearance of the Car and gives the older Fords the Stream-line Effect of the late Model; it allows a clear view.

Each

No. V15—Plate Glass; Width of Cowl 40½ in.; Will fit any Car with Straight Dash, which is of the same width from Outside to Outside at a point just in front of the Fore Doors; Complete with Loops for Top Strap Snaps.....$12.50

ADJUSTABLE TYPE

For 1915 and 1916 Ford Cars; Plate Glass; Width 39½ in., Height 24 in.; With Loops for Top Straps

Each

No. Z15—Not provided with Brackets or Cross Bar; Designed to fit into the Brackets on the Car when the Non-Ventilating Shield is removed; Complete with Bolts.....$10.00

No. Z16—Adjustable; Complete with Brackets and Cross Bar which is fitted with a Rubber Filler Strip which makes the Shield weather-proof when closed; Extra Heavy Steel Side Pieces..... 10 00

All, Average Weight 40 Lbs. Each

RAIN VISION, CLEAR VIEW AND VENTILATING TYPE

The Upper Section folds down as desired; it can be attached to many different models.

This Shield is fitted with a Sub-Frame which Clamps firmly to the Dash and is braced with Stay Rods; a Rubber Insert makes the Lower Section Weather-proof when closed; Finished in Black Enamel; Trimmings are Nickel Plated; Complete with 6x36 in. Ebony Finished Filler Board.

Each

No. A14 —Width 42 in., Height 24 in. $25.00

No. A14R—Width 38 in., Height 24 in. 25.00

STRAIGHT TYPE

Each

No. 10—Plate Glass; 42 in. Wide, 27½ in. High; For 1911 and 1912 Ford Cars; Can also be used on all Straight Dash Bodies; No Filled Board $15.00

No. 10C—With Coach Glass, Otherwise same as above..... 10.00

No. 74—Plate Glass; 38 in. Wide, 25½ in. High; Steel Tubing Frame, Black Enameled; Ball Bearing Hinges; 6x36 in. Ebony Finished Filler Board 15 00

No. 74C—With Coach Glass, Otherwise same as above..... 10.00

No. 75—Plate Glass; 42 in. Wide, 27½ in. High; Steel Tubing Frame, Black Enameled; Ball Bearing Hinges; 6x36 in. Ebony Finished Fiber Board 15.00

No. 75C—With Coach Glass, Otherwise same as above..... 10.00

ZIG ZAG TYPE

Each

No. 12—Plate Glass; 42 in Wide, 27½ in. High; same as Shields on the 1913 and 1914 Fords Cars; With Dividing Bars; Folds toward the Driver; No Filler Board; Complete with 13 in. Curved Rods to attach to Body $15.00

No. 12C—With Coach Glass, Otherwise same as above..... 10 00

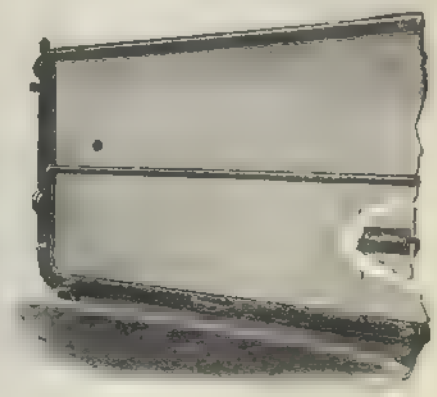
No. 77—Plate Glass; 38 in. Wide, 25½ in. High; Steel Tubing Frame, Black Enameled, Ball Bearing Hinges; 6x36 in. Ebony Finished Filler Board and 42 in. Stay Rods 15.00

No. 77C—With Coach Glass, Otherwise same as above..... 10.00

No. 78—Plate Glass; 42 in. Wide, 29½ in. High; Steel Tubing Frame, Black Enameled; Ball Bearing Hinges; 6x36 in. Ebony Finished Filler Board and 42 in. Stay Rods 15.00

No. 78C—With Coach Glass, Otherwise same as above..... 10.00

All, Average Weight, 40 Lbs. Each



WEATHERSTRIP

A strip of real Rubber formed to fit the Shield and keep out the weather; Simple and Effective; Fits between the Glasses of any Clear Vision Shield and Effectively closes the space; Does not interfere with the working of Shield; When not needed it can be rolled up and put away.

Each

No. WS—In 42 in. Lengths, which can be cut as desired..... .....$0.75

Open Stock

WAKEFIELD INTERCHANGEABLE FIXTURES

ELECTRIC WALL BRACKETS

Suggestions for No. 1201 and 1220 Bracket Canopy

It is possible to Transform these Fixtures into 1, 2 or 3-Light

PLATE No. 1201A

Extends 8 in.

Composed of Bracket Canopy No. 1201 and Arm No. 204.

ONE LIGHT (ONE ARM)

	Each
No. 1201A-BB—Brushed Brass	$1 00
No. 1201A-OC—Oxidized Copper	1 00

TWO LIGHT (TWO ARMS)

No. 1201A-2BB—Brushed Brass	1 35
No. 1201A-2OC—Oxidized Copper	1 35

THREE LIGHT (THREE ARMS)

No. 1201A-3BB—Brushed Brass	1 70
No. 1201A-3OC—Oxidized Copper	1.70

Weights: 1 Light ⅝ Lb., 2 Light ⅝ Lb. and 3 Light ⅞ Lb. Each

PLATE No. 1201B

Extends 9 in.

Composed of Bracket Canopy No. 1201 and Arms No. 211½.

ONE LIGHT (ONE ARM)

	Each
No. 1201B-BB—Brushed Brass	$1.45
No. 1201B-OC—Oxidized Copper	1 45

TWO LIGHT (TWO ARMS)

No. 1201B-2BB—Brushed Brass	2.25
No. 1201B-2OC—Oxidized Copper	2 25

THREE LIGHT (THREE ARMS)

No. 1201B-3BB—Brushed Brass	3 05
No. 1201B-3OC—Oxidized Copper	3.05

Weights: 1 Light ⅝ Lb., 2 Light 1 Lb. and 3 Light 1⅛ Lbs. Each

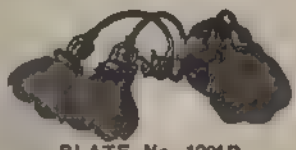


PLATE No. 1201D

Extends 9 in.

Composed of Bracket Canopy No. 1201 and Arms No. 217.

ONE LIGHT (ONE ARM)

	Each
No. 1201D-BB—Brushed Brass	$1.70
No. 1201D-OC—Oxidized Copper	1.70

TWO LIGHT (TWO ARMS)

No. 1201D-2BB—Brushed Brass	2.75
No. 1201D-2OC—Oxidized Copper	2.75

THREE LIGHT (THREE ARMS)

No. 1201D-3BB—Brushed Brass	3.80
No. 1201D-3OC—Oxidized Copper	3.80

Weights: 1 Light ⅝ Lb., 2 Light 1 Lb. and 3 Light 1⅛ Lbs. Each

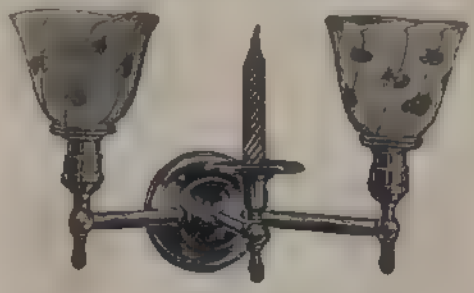


PLATE No. 1201X

THREE LIGHT

Extends 9 in., Spread 12 in.

Composed of 1 Bracket Canopy No. 1201, 3 Arms No. 221 and 1 No. 2006 Candle Holder Complete with Candle.

	Each
No. 1201X-3BB—Brushed Brass	$4.11
No. 1201X-3OC—Oxidized Copper	4.11

Weight 1⅛ Lbs. Each

PLATE No. 1220B

Extends 8 in.

Composed of Bracket Canopy No. 1220, Arm No. 203, 2 ⅜-in. Terminals No. 1225 and 1 Link ⅜ in. Chain No. 1222.

No. 1220B-BB—Brushed Brass	$1.15
No. 1220B-OC—Oxidized Copper	1.15

Weight ⅝ Lb. Each

PLATE No. 1220A

CEILING OR PORCH CANOPY

Composed of Bracket Canopy No. 1220 and 1 3¼-in. Globe Holder.

	Each
No. 1220A-BB—Brushed Brass	$0.70
No. 1220A-OC—Oxidized Copper	.70

Weight ⅛ Lb. Each

PLATE No. 1220D

Length 5 in.

Composed of Bracket Canopy No. 1220, 2 ⅜-in. Terminals No. 1225 and 1 Link ⅜-in. Chain No. 1222.

	Each
No. 1220D-BB—Brushed Brass	$0.70
No. 1220D-OC—Oxidized Copper	.70

Weight ⅛ Lb. Each

Note—Prices do not include Sockets, Glassware, or Trimmings except where specified

WAKEFIELD INTERCHANGEABLE FIXTURES

WALL BRACKETS

Suggestions for Nos. 1209, 1009 and 1409 Bracket Backs

It is possible to Transform these Fixtures into 1, 2 or 3-Light

PLATE No. 1209D

ELECTRIC WALL BRACKET

Length 6 in.

Composed of Bracket Back No. 1209, 2 ⅜-in. Terminals No. 1225 and 1 Link ⅜ in. Chain No. 1222.

	Each
No. 1209D-BB—Brushed Brass Finish	$1.35
No. 1209D-OC—Oxidized Copper Finish	1.35

Weight 1⅛ Lbs. Each

PLATE No. 1209G

ELECTRIC WALL BRACKET

Extends 12 in.

Composed of Bracket Back No. 1209 and Arms No. 204

	Each
ONE LIGHT (ONE ARM)	
No. 1209G-BB—Brushed Brass Finish	$1.35
No. 1209G-OC—Oxidized Copper Finish	1.35
TWO LIGHT (TWO ARMS)	
No. 1209G-2BB—Brushed Brass Finish	1.70
No. 1209G-2OC—Oxidized Copper Finish	1.70
THREE LIGHT (THREE ARMS)	
No. 1209G-3BB—Brushed Brass Finish	2.05
No. 1209G-3OC—Oxidized Copper Finish	2.05

Weights: 1 Light 1⅛ Lbs., 2 Light 1¾ Lbs., 3 Light 1⅝ Lbs. Each

PLATE No. 1009R

GAS WALL BRACKETS

Composed of Bracket Back No. 1009 and Arms No. 13.

	Each
ONE LIGHT (ONE ARM)	
No. 1009R-BB—Brushed Brass	$2.10
No. 1009R-OC—Oxidized Copper	2.10
TWO LIGHT (TWO ARMS)	
No. 1009R-2BB—Brushed Brass	3.20
No. 1009R-2OC—Oxidized Copper	3.20
THREE LIGHT (THREE ARMS)	
No. 1009R-3BB—Brushed Brass	4.30
No. 1009R-3OC—Oxidized Copper	4.30

Weights: 1 Light 1⅛ Lbs., 2 Light 1⅝ Lbs. and 3 Light 2 Lbs. Each

PLATE No. 1409X

COMBINATION WALL BRACKET

Extends 10 in., Spread 12 in

Composed of Bracket Back No. 1409, 2 Arms No. 211, 1 No. 2006 Candle Holder, Complete with Candle and No. 1228 Socket Nipple.

No. 1409X-3BB—Brushed Brass	$3.19
No. 1409X-3OC—Oxidized Copper	3.19

Weight 2 Lbs. Each

PLATE No. 1409D

COMBINATION WALL BRACKET

Extends 12 in., Spread 12 in.

Three Light

Composed of Bracket Back No. 1409, 2 Arms No. 217 and 1 Arm No. 17.

No. 1409D-3BB—Brushed Brass	$4.40
No. 1409D-3OC—Oxidized Copper	4.40

Weight 2 Lbs. Each

Note—Prices do not include Sockets, Glassware or Trimmings except where specified

WALL TENTS

Showing Wall Tent, without Flies

RELIABLE GRADE

Priced without Poles, but with Pegs and Guy Ropes

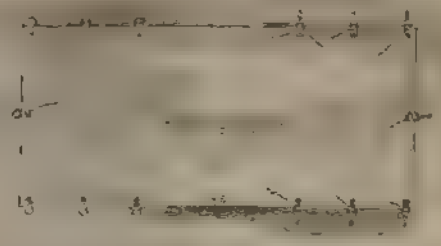
For Poles add 15% to Net Price of Tent

If wanted with Flies add One-Half to price of Tents

Floor Space Feet	Height Center Feet	Height Wall	10 Oz. Single Filling Each	8 Oz. Single Filling Each
7x9	6½	2 ft., 10 in.	$13.35	$12 00
8x10	7	2 ft., 10 in.	14.40	12.90
10x12	7	2 ft., 10 in.	18.20	16.20
12x14	7½	3 ft., 4 in.	24.00	21.40
14x16	8½	3 ft., 10 in.	31 20	27.70

Other Sizes and Weights furnished to Special Order

BED SHEETS



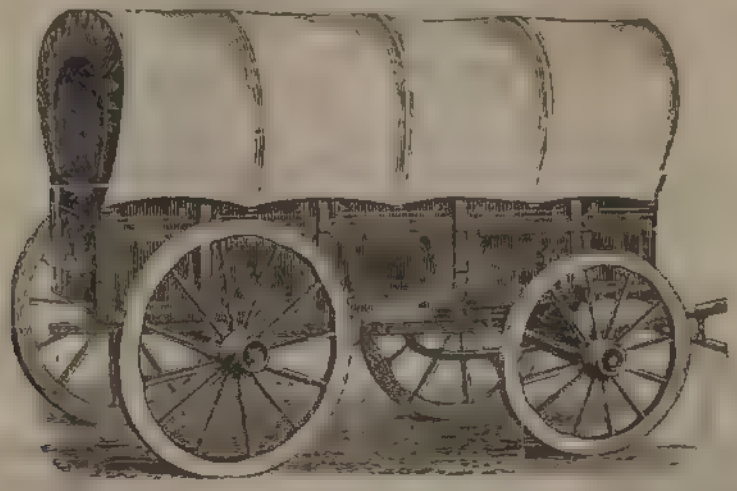
STOCKMEN'S BED SHEETS

15 Oz. Zenith Grade, U. S. A. Army Duck

Size, Feet	6x12	6x14
Each	$7.00	8.10

Other Sizes and Weights furnished to Special Order

WAGON COVERS



LAKESIDE GRADE

40 In., Single Fill Duck

For use with Wagon Bows. Prices include draw and tie ropes, but do not include bows. Can also be used for machine covers, hay stack covers, etc

	10 Oz. Duck		12 Oz. Duck	
Size, Feet	10x10	10x12	10x10	10x12
Each	$4.30	5.00	5.50	6.50

Other Sizes and Weights furnished to Special Order

BODY STRAP SLEIGH BELLS

QUEBEC

Per String

No. 011—Black Leather Strap, 7½ ft. Long, 1¾ in. Wide, Japanned Buckle; Billet Riveted on; 20 2½ in. Wrought Steel, Nickel Plated Dexter Bells, Strongly Riveted to Strap $5 00

One String in a Carton; Weight 4½ Lbs. per String

RIM BELLS, Wired on Russet Strap

Heavy Russet Leather Strap, 7½ ft. Long, 1 in. Wide, Lined with Grain Leather; XC Plate Buckle; Polished Steel Rim Bells, Assorted Sizes; Wire Fastened; very Pleasant and Harmonious.

Per String

No. 056—19 Bells, Assorted Sizes, Eight 1¼ in., Six 1⅛ in., Two 1½ in., Two 1⅝ in., One 1¾ in. Diam..... $3.00

Weight 3 Lbs. per String

No. 060—19 Bells, Assorted Sizes, Four 1⅛ in., Four 1⅜ in., Four 1⅝ in., Two 1⅞ in., Two 2⅛ in., Two 2¼ in., One 2⅜ in. Diam. 4 50

One String in a Carton; Weight 4¾ Lbs. per String

LEATHER STRAP

Good Quality Black Polished Leather Strap, 7½ ft. Long, 1 in. Wide, Nicely Finished Edges; Nickel Plated Buckle; Round Tinned Bells, Strongly Riveted to Strap; Uniform in Tone and can be heard some distance.

Per String

No. 171—42 Bells, 1⅛ in. Diam $4.00
No. 178—30 Bells, 1⅛ in. Diam,. 4.00

Weight 3¼ Lbs. per String

RIM BELLS, Riveted on Black Strap

Black Leather Strap, 7½ ft. Long, 1 in. Wide; Bells are Strongly Riveted; Japanned Buckle; A Good Grade for Farmers, Loggers, etc.

Nickel Plated

Per String

No. 694—31 Bells; Assorted Sizes, Twelve 1 in., Eight 1⅛ in., Four 1¼ in., Two 1⅜ in., Two 1½ in., Two 1⅝ in., One 1¾ in Diam $5.00

Weight 2¾ Lbs. per String

No. 693—25 Bells, Assorted Sizes, Ten 1 in., Six 1⅛ in., Two 1¼ in., Two 1⅜ in., Two 1½ in., Two 1⅝ in. and One 1¾ in. Diam. 4.00

Weight 2½ Lbs. per String

Silver White Finish

No. 684—25 Bells, Assorted Sizes, Ten 1 in., Six 1⅛ in., Two 1¼ in., Two 1⅜ in., Two 1½ in., Two 1⅝ in., and One 1¾ in. Diam..... 3.85

Weight 2½ Lbs per String

Tinned

No. 1718—31 Bells, Assorted Sizes, Twelve 1 in., Eight 1⅛ in., Four 1¼ in., Two 1⅜ in., Two 1½ in., Two 1⅝ in., and One 1¾ in. Diam..... 3.00

Weight 2¾ Lbs. per String

No. 1717—25 Bells, Assorted Sizes, Ten 1 in., Six 1⅛ in., Two 1¼ in., Two 1⅜ in., Two 1½ in., Two 1⅝ in., and One 1¾ in. Diam. 2.80

Weight 2¼ Lbs. per String

No. 639—19 Bells, Assorted Sizes, Eight 1 in., Two 1⅛ in., Two 1¼ in., Two 1⅜ in., Two 1½ in., Two 1⅝ in., and One 1¾ in. Diam. 2.50

Weight 2¼ Lbs. per String

No. 0639—19 Bells, Assorted Sizes, Eight 1⅛ in., Four 1¼ in., Two 1⅜ in., Two 1½ in., Two 1⅝ in., and One 1¾ in. Diam. Web Covered Strap. 2.50

Weight 2 Lbs. per String

Dexter

ARCTIC BELLS, Formed from Wrought Steel

Riveted on Polished Black Leather Strap, 7½ ft. Long, 1 in. Wide

Per String

No. 789—30 Nickel Plated Bells, 1⅛ in. Diam..... $2.80

Weight 1¾ Lbs. per String

No. 1603—30 Nickel Plated Bells, 1¼ in. Diam..... 3.00

Weight 2¾ Lbs. per String

25 Arctic Bells, Assorted Sizes, Eight 1 in., Six 1⅛ in., Four 1¼ in., Four 1⅜ in., Two 1½ in., One 1⅝ in. Diam.

No. 1605—Nickel Plated 2.80

Weight 1⅝ Lbs. per String

No. 1201—42 Rolled Nickel Plated Bells, 1¼ in. Diam.; Weight 2¾ Lbs. per String.. ..... 3 50

DEXTER BELLS, Formed from Wrought Steel

Riveted on Polished Black Leather Strap, 7½ ft. Long, 1 in. Wide

Per String

No. 839—30 Rolled Nickel Plated Bells, 1⅛ in. Diam.; Weight 1¼ Lbs. per String.. ..... $2 80

One String in a Package

ENGINE GOVERNORS

WATERS

Perfectly adapted to every variety of Stationary and Portable Steam Engine; Adjustable Speed, Automatic Safety Stop; Solid Composition Valves and Seats; Interchangeable Parts

CLASS A
With Automatic Stop Motion
Plain or Finished

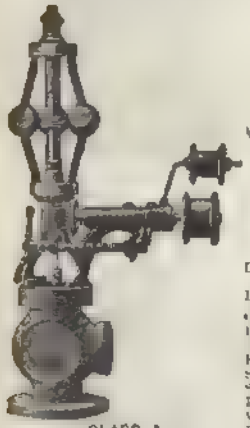
CLASS B
Without Automatic Stop Motion
Plain or Finished

SIZE OF GOVERNOR / DIAMETER OF FLY-BALLS IN	¾	1	1¼	1½	2	2½	2½	3	3½	4	4½	5	6
Diam. Base Flange, In	4	4	5	5	6	7	8	9	10	11	12	13	14
Diam. Side Flange, In.	3½	3½	4	4½	5	6	6½	7	8	9	10	11	12
Diam. Space for B. S. Governor, In	3	3	3	4	4½	5	6	7	8	9	10	11	12
Center to Side Flange, In	2	2½	2½	3	3½	4½	5	6	6½	7½	8½	9½	10½
Base to Center Hole, In	2	2½	3	3½	4	4½	5	6	6½	7½	8½	9½	10½
Height, Class A, In	5	6	6	7½	8½	9½	10½	11½	12½	13½	14½	15½	16½
Height, Class B, In	7	8	8	9	10	11	12	13	14	15	16	17	18
Center to End of Shaft, In	6	6	6	6½	7	8	9	10	11	12	13	14	15
Diam. of Pulley, In.	2	2½	3	3	4	4	4	4	4	4	5	5	6
Width of Belt, In	¾	1	1	1½	2	2½	3	3½	4	4½	5	5½	6
Weight, Class A, Lbs	40	50	70	90	120	160	210	260	320	400	500	600	750
Class A Finish			$ 1	$ 1	$ 1	$ 1	$ 1	$ 1	$ 1	$ 1	$ 1	$ 1	$ 1
Class A Finished													
Class B Plain	$14 00	$ 16 00	$ 18 00	$ 20 00	$ 30 00	$ 35 00	$ 40 00	$ 45 00	$ 50 00	$ 60 00	$ 75 00	$ 90 00	$ 110 00
Class B Finished	$ 18 00	$ 20 00	$ 24 00	$ 26 00	$ 34 00	$ 40 00	$ 46 00	$ 52 00	$ 60 00	$ 70 00	$ 90 00	$ 105 00	$ 130 00

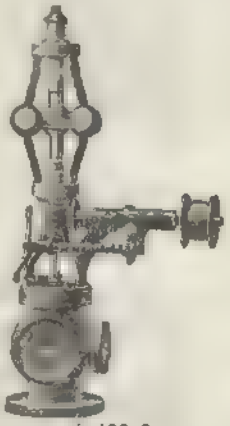
PICKERING

For Stationary and Portable Engines

With Automatic Safety Stop, Speed Adjuster and Sawyer's Lever; Steam Metal Valves and Seats having no joints, the action is direct, insuring extreme sensitiveness



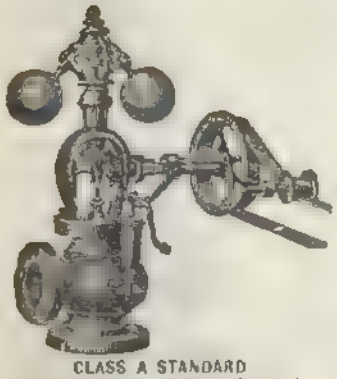
CLASS A
With Speeder
Plain or Finished



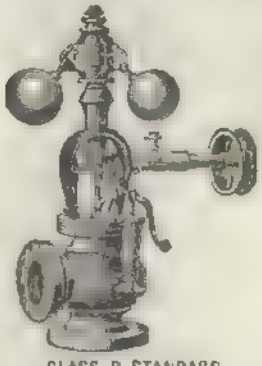
CLASS B
With Speeder and Sawyer's Lever
Plain or Finished

SIZE OF GOVERNOR / DIAMETER OF FLY-BALLS IN	¾	1	1¼	1½	2	2½	3	3½	4	4½	5	6
Diameter Base Flange, In	4	4	5	5	6	7	8	9	10	11	12	14
Diameter Side Flange, In	3½	3½	4	4½	5	6	6½	7	8	9	10	12
Center to Side Flange, In	2	2½	2½	3	3½	4	4½	5	6	6½	7½	8½
Base to Center Hole, In	2	2½	3	3½	4	5	5½	6	6½	7½	8½	9½
Diameter Pulley, In	2½	3	3	4	5	6	7	8	9	10	11	12
Extreme Height, In	11	11	12	13	14	15	16	17	18	19	20	22
Swing of Balls, In	5	6	6	6	7	8	8½	9	9½	10	11	12
Speed of Governor, Revolutions	400	350	300	340	310	340	275	275	340	300	320	270	250
Diameter Pulley, In	2	2	2½	2½	3	3½	3	4	4	4	4	4	4
Width of Belt, In	¾	1	1	1½	1½	1½	2	2	2	2	2	2	2
Weight, Lbs	40	50	60	80	100	120	140	160	180	200	250	300	400
Class A Plain	$ 15 50	$ 18 50	$ 21 00	$ 24 00	$ 27 00	$ 30 00	$ 34 00	$ 38 00	$ 42 00	$ 46 00	$ 50 00	$ 58 00	$ 70 00
Class A Finished	$ 18 50	$ 20 50	$ 23 00	$ 26 00	$ 30 00	$ 34 00	$ 38 00	$ 42 00	$ 46 00	$ 50 00	$ 56 00	$ 64 00	$ 76 00
Class B Plain	$ 14 00	$ 16 00	$ 18 00	$ 20 00	$ 24 00	$ 28 00	$ 32 00	$ 36 00	$ 40 00	$ 44 00	$ 48 00	$ 56 00	$ 68 00
Class B Finished	$ 16 00	$ 18 00	$ 20 00	$ 22 00	$ 26 00	$ 30 00	$ 34 00	$ 38 00	$ 42 00	$ 46 00	$ 50 00	$ 58 00	$ 70 00

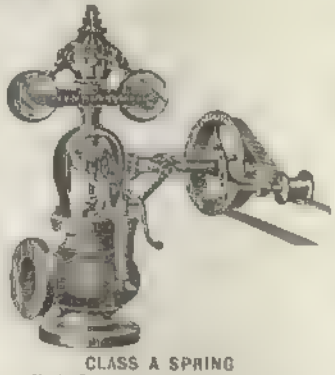
JUDSON



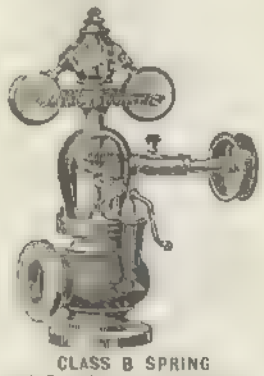
CLASS A STANDARD
Medium Speed. Plain or Finished



CLASS B STANDARD
Medium Speed. Plain or Finished



CLASS A SPRING
High Speed. Plain or Finished



CLASS B SPRING
High Speed. Plain or Finished

Adapted to Every Variety of Steam Engines; Fitted with Automatic Stop Motion, Speeder and Sawyer's Lever

SIZE GOVERNOR / DIAMETER OF FLY-BALLS IN	¾	1	1¼	1½	2	2½	3	3½	4	4½	5	6
Diameter Base Flange, In	4	4	5	5	6	7	8	9	10	11	12	14
Diameter Side Flange, In	3½ Screw	3½ Screw	4 Screw	4½ Screw	5 Screw	6 Screw	6½ Screw	7 Screw	8 Screw	9 Screw	10 Screw	12 Screw
Center to Side Flange, In	¾	1	1	1½	1½	2	2½	3	3½	4	4½	5
Inside Diameter of Ball, In	2	2	2½	3	3½	4	4½	5	5½	6	6½	7½
Center to Center of Balls, In	4	4	5	6	7	8	9	10	11	12	13	15
Extreme Height, In	11	11½	12	13	14	15	16	17	18	19	20	22
Swing of Balls, In	5	5	6	6	7	8	8½	9	9½	10	11	12
Speed Standard Governor, Revolutions	400	350	300	340	310	340	275	275	340	300	320	270
Speed Spring Governor, Revolutions	450	400	350	400	360	400	320	320	400	350	375	320
Diameter Pulley Standard Governor, In	2	2	2½	2½	3	3½	3	4	4	4	4	4
Diameter Pulley Spring Governor, In	1½	1½	2	2	2½	3	3	3½	4	4½	5	6
Width of Belt, In	¾	1	1	1½	1½	1½	2	2	2	2	2	2
Weight, Lbs	15	20	25	40	60	75	105	130	160	190	240	300	400
About Class A	14	18	22	30	40	50	70	90	110	130	160	200	260
Class A Plain	$ 10 00	$ 12 00	$ 14 00	$ 16 00	$ 20 00	$ 24 00	$ 28 00	$ 32 00	$ 36 00	$ 40 00	$ 44 00	$ 52 00	$ 64 00
Class A Finished	$ 12 00	$ 14 00	$ 16 00	$ 18 00	$ 22 00	$ 26 00	$ 30 00	$ 34 00	$ 38 00	$ 42 00	$ 46 00	$ 54 00	$ 66 00
Class B Plain	$ 11 00	$ 13 00	$ 15 00	$ 17 00	$ 21 00	$ 25 00	$ 29 00	$ 33 00	$ 37 00	$ 41 00	$ 45 00	$ 53 00	$ 65 00
Class B Finished	$ 13 00	$ 15 00	$ 17 00	$ 19 00	$ 23 00	$ 27 00	$ 31 00	$ 35 00	$ 39 00	$ 43 00	$ 47 00	$ 55 00	$ 67 00

FEED WATER HEATERS

A Steam Plant is incomplete without a Feed Water Heater they are used to furnish Hot Water to the Boilers, of the same temperature as the steam, relieving the Boiler of the strain from expansion and contraction caused by feeding cold water

SIMS, CLOSED TYPE

The Closed or Tubular Type of Heater is designed so that the exhaust steam and feed water are not in direct contact with each other. Generally used where there is but a small amount of scale-making matter in water.

Size Nos.	Horse Power	No. of Tubes	Approx. Wt. Each, Lbs	Each
1	30	12	220	$105 00
2	40	12	260	115 00
3	50	12	285	125 00
4	60	12	320	140 00
5	80	24	650	160 00
6	100	24	800	180 00
7	125	24	900	225 00
8	150	24	1050	270 00
9	175	36	1100	300 00
10	200	36	1200	330 00
11	250	36	1325	380 00
12	300	36	1500	425 00
13	400	60	2100	525 00
14	500	60	2400	625 00
15	600	60	2700	750 00
16	700	60	2820	875 00
17	800	102	5033	1000 00
18	900	102	5200	1125 00
19	1000	102	5340	1275 00

COCHRANE, OPEN TYPE

F. O. B. Factory

STANDARD

Feed Water Heaters and Purifiers

To be used only in Plants where the Exhaust is free to the atmosphere at all times

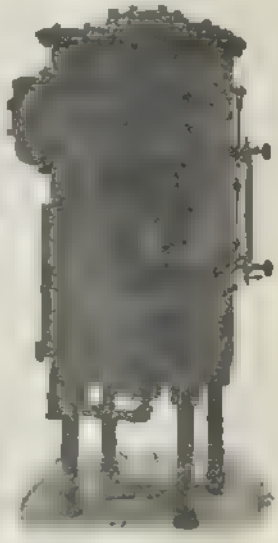
Horse Pwr.	100	150	200	250	300	350
Wt. Lbs.	1150	1350	1750	1950	2400	2750
Each...	$154.00	200 00	260 00	293 00	357 00	400 00
Horse Pwr.	425	500	600	750	850	1000
Wt. Lbs.	3150	3450	3850	4400	4800	5800
Each..	430 00	472 00	520 00	594 00	688 00	771 00

SPECIAL

Feed Water Heaters and Receivers

To be used in connection with any kind of Heating or Drying System

Horse Pwr.	75	100	150	200	250	300
Wt. Lbs.	1500	1700	1850	2700	3300	4000
Each...	$352.00	256 00	314 00	418.00	499.00	580 00
Horse Power..	400	500	750	850	1000	
Weight, Lbs	4450	5200	6700	7400	8200	
Each.....	688 00	785 00	934.00	1074 00	1184 00	

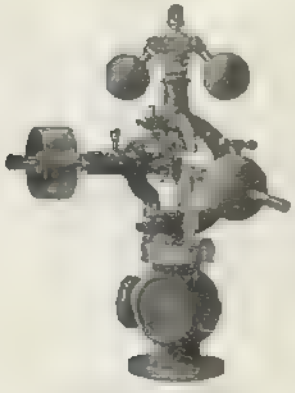


Cut Shows Smaller Sizes; the Large Heaters do not stand on Legs

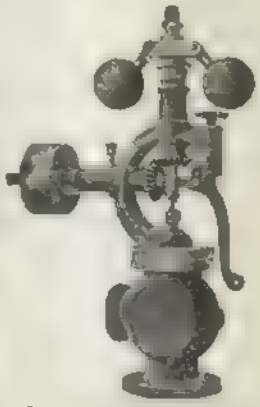
ENGINE GOVERNORS

GARDNER STANDARD GOVERNORS

Size of Governor Diameter of Opening	1¼	1½	2	2½	2½	3	3½	4	4½	5	6
Diameter of Base Flange, In	Scr.	6½	7	7	8	9	9	9	10	10	12
Diameter of Side Flange, In	Scr.	Scr.	Scr.	Scr.	7	8	8	8	9	9	11
Swing of Balls, In	3	4	4	4	5	5	5	5	6	6	7
Center to Side Flange, In	3¼	3½	4¼	4½	5½	6	6½	6½	7	7½	8½
Extreme Height of Inlet, In	3¾	4	4¾	5	5¾	6	6½	6	7	7½	8½
Extreme Height, In	20	22½	27¼	28	28½	32	34	37	38	41	44
Center to End of Shaft, In	11	11	13	13	14	14	14	17	17	21	21
Diameter of Pulley, In	6	6	6	6	6	6	6	6	6	6	6
Face of Pulley, In	1¼	1½	2	2	2	2	2	2	2	3	3
No. Revolutions	250	250	200	200	200	170	170	160	160	150	150
Weight, Class A, Lbs	60	65	104	121	132	175	187	227	248	440	440
Weight, Class B, Lbs	42	51	85	98	107	152	165	216	227	356	375
Class A Plain	$24 50	29.50	36 00	42 00	48 00	59 00	71 00	83 00	96 00	109 00	140 00
Class A Finished	$27 50	33 50	40 00	47 00	53 00	67 00	80 00	93 00	105 00	121 00	154 00
Class B Plain	$21 00	25 00	30 00	35 00	40 00	50 00	60 00	71 00	83 00	94 00	122 00
Class B Finished	$24 00	29 00	34 00	40 00	45 00	58 00	69 00	81 00	94 00	106 00	136 00



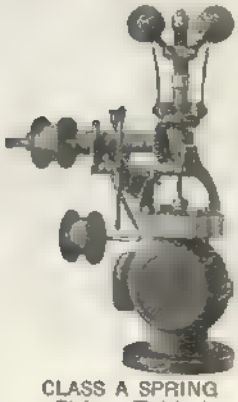
CLASS A STANDARD
Plain or Finished



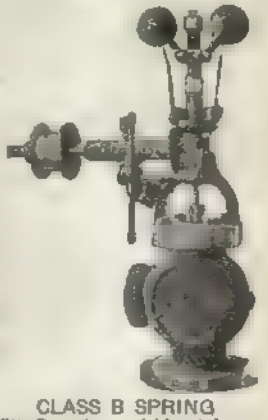
CLASS B STANDARD
Plain or Finished

GARDNER SPRING GOVERNORS

Size Governor Diameter of Opening	½	¾	1	1¼	1½	2	2½	2½	3	3½	4	4½	5
Diameter Base Flange, In	Scr.	Scr.	Scr.	Scr.	5½	7	7	8	9	9	10	10	12
Diameter Side Flange, In	Scr.	Scr.	Scr.	Scr.	Scr.	Scr.	7	7	8	9	9	10	11
Height, Inches	12	13	13½	19½	22	23	24	27	29	30	33	36	37
Swing of Balls, In	2½	2½	2½	3½	4	4	4	5	5	5	6	6	6
Length of Shaft, In	8	8	8	11	11	13	13	15	15	17	17	17	21
Diameter Pulley, In	1½	1½	1½	2	2	2½	2½	3½	3½	3½	4½	4½	4½
Width of Belt, In	1	1	1	1½	1½	1½	1½	2	2	2	2½	2½	2½
Center to side of Chamber	1¾	2¼	2¼	3	3½	5	5	5½	6	6½	6½	7	7½
Diameter Top of Chamber	1½	2½	2½	3	3	3	3	3½	5	5	5	5	5
No. Revolutions	600	600	600	450	400	400	400	350	350	350	275	275	275
Weight, Class A, Lbs		19	29	36	51	70	80	131	130	140	230	240	230
Weight, Class B, Lbs	15	17	18	32	44	60	72	117	127	121	208	232	214
Class A Plain	$18 50	20 00	24 50	29 00	36 00	42 00	48 00	60 00	71 00	83 00	94 00	106 00	140 00
Class A Finished	$20 00	22 00	27.50	33 50	40 00	47 00	54.00	67 00	80 00	93 00	105 00	121 00	
Class B Plain	$14 00	16 00	18 00	21 00	25 00	30 00	35 00	40 00	50 00	60 00	71 00	83.00	94 00
Class B Finished	$16.00	18 00	20.00	24.00	29.00	34.00	40.00	45.00	58 00	69 00	81.00	94 00	106 00



CLASS A SPRING
Plain or Finished



CLASS B SPRING
With Speeder and Hand Lever

CLASS A is for Slow and Medium Speed Stationary Engines and is fitted with Automatic Safety Stop, it is of the Gravity Action entirely. Sizes from 1¼ to 6 in

CLASS B is a combination of Spring and Gravity Actions, has Speeder and Sawyer's Lever but no Automatic Stop; by attaching a Cord to Lever; Valve can be controlled at some distance.

SPRING GOVERNORS—For High Speed Stationary and particularly Portable Engines, they are very sensitive and respond readily to changes in loads; they have a Speeder, which gives a wide range of speed, and a Sawyer's Lever; the Class A has in addition an Automatic Stop

WHITELY EXERCISERS

It is Impossible to Overdo with a Whitely

The Whitely Exerciser is a Practical Home Gymnasium, made of Elastic Cables running over noiseless pulleys. The handles and pulleys are Swiveled, thereby allowing a variety of Movements, so that every muscle in the body can be properly exercised. It is small and compact and can be fastened to Door Frame, Hinges, or any convenient place.

Is always ready, without any adjustment, and can be put up or taken down at the convenience of the user. Equally suitable for Men, Women and Children, from the strongest to the weakest. Each Exerciser is packed with Hooks, Hinge Attachment, and Elastic Foot Attachment, complete for use.

IDEAL

Wood Pulleys, Metal Parts; Finished in Black Enamel and Nickel; With Chart of Exercise; Particularly Suitable for Children

	Each
No. 125L—Light Tension Cable	$1.25
No. 125M—Medium Tension Cable	1.25

One in a Box; Weight 1 Lb. Each

VIM

Wood Pulleys, Metal Parts; Finished in Black Enamel and Nickel; With Chart of Exercises

	Each
No. 200M—Medium Tension Cable	$2 00
No. 200H—Heavy Tension Cable	2.00

One in a Box; Weight 1¼ Lbs. Each

STANDARD

Noiseless, Improved Patent Steel Pulleys; Metal Parts Finished in Black Enamel and Nickel, With Anderson's Physical Director

	Each
No. 300M—Medium Tension Cable	$3.00
No. 300H—Heavy Tension Cable	3.00

One in a Box; Weight 1½ Lbs. Each

ATHLETE

Specially Suited for Gymnasium and Strong Men; Extra Large Rosewood Pulleys, Self-Oiling Bearings, Metal Parts Nickel Finished, with a copy of Anderson's Physical Director, a complete treatise on the care and perfection of the body.

	Each
No. 400—Extra Heavy Tension Cable	$4.00

One in a Box. Weight 2¼ Lbs. Each

SPECIAL

Highly Polished, Noiseless Steel Pulleys, Metal Parts Nickel Finish, Silk Covered Cable; With Anderson's Physical Education

	Each
No. 500M—Medium Tension Cable	$5 00
No. 500H—Heavy Tension Cable	5.00

One in a Box; Weight 2 Lbs. Each

INDIAN SWINGING CLUBS

No. 500—MAPLE

Turned from Extra Quality Maple, Finished in Hard Oil

Weight Each, Lbs	¾	1	1½	2	3	4	5
Per Pair	$0.35	.40	.45	.50	.65	.90	1.25

WOODEN DUMB BELLS

No. 700—MAPLE

Turned from Selected Maple, Finished in Hard Oil; Evenly Balanced

Weight Each, Lbs	¾	1	2	3	4	5
Per Pair	$0.45	.50	.60	.85	1.00	1.25

Open Stock

IRON DUMB BELLS

No. 800—JAPANNED

Cast Iron, Japanned Black, Correctly Shaped Grip, Evenly Balanced

Weight Each, Lbs	1	2	3	4	5	8	10	15	20	25
Per Lb.	$0.10	.10	.10	.10	.10	.10	.10	.10	.10	.10

Medium Cables, Light Clubs and Bells promote quick action and better results than the heavier weights

ATHLETIC CLOTHING AND SHOES

SLEEVELESS JERSEYS OR SHIRTS

Breast Sizes 28 to 42 inches

Suitable for Field, Track, Swimming, Rowing and Gymnasium Athletics

	Each
+No. 150—Navy Blue; Medium Weight, Worsted	$4 00
+No. 50—White Cotton, Medium Weight	.80

FULL SLEEVE JERSEYS OR SHIRTS, WITH COLLAR

Breast Sizes 28 to 42 inches

Suitable for Field, Track and Gymnasium Athletics and every day wear

	Each
+No. 154—Navy Blue; Medium Weight, Worsted	$5.00

Average Weight 4 Lbs per Dozen

TRACK PANTS

Waist Sizes 28 to 38 inches

Suitable for Field, Track and Gymnasium Athletics; Made with Fly Front and Laced Back.

	Per Pair
+No. 206—White; Finest Quality Cotton	$0 80

ANKLE PROTECTORS

For Hurdling, Jumping, Pole Vaulting, Skating, etc.; Will strengthen the ankle and prevent turning

	Per Doz Pairs
No. 28—Finest Russia Calf, Laced Front	$15.00

WRIST PROTECTORS

Suitable for all Athletic contests and every-day wear, if Wrist is strained or weak will strengthen it and prevent injury.

	Per Dozen
No. 9—Fine Grain Leather, to Buckle	$6 00

MIZPAH JOCK SUPPORTS

For Cyclists, Athletes, Baseball, Football, Tennis Players, etc., all Elastic, gives with every move; No. Buckles or Straps; Pressure is evenly distributed; Most comfortable Support made; Front Opening.

	Waist Measure	Per Doz.
No. 44S— Small	Size; 22 to 28 in..	$12.00
No. 44M—Medium	Size; 28 to 36 in..	12.00
No. 44L— Large	Size; 36 to 44 in..	12.00

Each Garment Packed in Neat Box

BOWLING AND GYM SHOES

Black Kangaroo Upper with soft Chamois Sole which prevents slipping; Light weight and flexible, permitting perfect foot control, yet durable; Sizes 5 to 10.

	Per Pair
+No. 53 —Lace to Toe Styles	$5.00
+No. 1490—Style as Cut	5.00
+No. 503 —Light for Gym Athletics, Black Uppers, Chrome Elk, Non-Slipping Sole	3.50

Average Weight 1¼ Lbs per Pair

BASKET BALL SHOES

The Vacuum Suction Cups on Soles makes an Air Cushion Support securing positive purchase on the most slippery polished floor; Upper of Fine Black Kangaroo Calf

	Per Pair
+No. 1853—Sizes 5 to 11	$6 00

Average Weight 1¾ Lbs. per Pair

FOOT BALL SHOES

Black Calf Leather; Correctly made to withstand all hard usage to which a Foot Ball Shoe is subjected; Flexible Shank, Leather Cleats strongly secured

	Per Pair
+No. 490—Sizes 5 to 11	$5 00

Average Weight 2¼ Lbs. per Pair

In Ordering Shoes, etc., Please Mention Sizes Desired

+Not Carried in Stock; Shipped Promptly Direct From Nearby Factory

DESERT WATER BAGS

Regular Style

Used by Farmers, Sheep and Cattlemen, Miners, Prospectors, Teamsters, Campers, Motor-Tourists, Timbermen, Millmen, Construction Crews, Hunters, Surveyors, Boatmen, Railroad Section Men and in all places where Drinking Water has to be carried.

Faucet Style

PORTABLE DRINKING WATER CARRIER

Cools water without ice and keeps it cool in any temperature, and fresh and palatable for several days, if hung exposed to open-air circulation or draught, either in blazing sun or shade. This is caused by a slight evaporation through the Fabric.

Made of Pure Durable Imported Flax, woven especially for this purpose; carefully and securely stitched with seams turned inside. Larger sizes can be furnished with Faucet for greater ease in obtaining the water. All sizes have Rope for carrying over shoulder or for fastening to saddle or wagon, and are extended at Top by Piece of Wood stitched into Seam.

Nos.	Capacity, Gals.	Size, In.	Wt. Doz., Lbs.	Per Dozen
1 —Sporting	1	10 x12	6½	$13.50
2½ —Regular	2½	11⅛x17	9⅛	17.00
3½ —Regular	3½	12⅛x23½	12⅛	24.00
5 —Regular	5	17⅛x23½	15	30.00
3½F—With Faucet	3½	12⅛x23½	17	32.00
5F —With Faucet	5	17⅛x23½	21	40.00

Open Stock

WAGON AND CARRIAGE JACKS

IMPROVED SAMPSON, WAGON

Also suitable for pulling Fence Posts; adjusting Bottom Rails, Sills or Light Frame Work.

One Piece Lever will not break, as pressure is equal on both side. Pinion and Cog Wheel are made in one piece preventing the Pinion from turning. Frame is supported by extra Bolt making it very firm. No lost motion when working on high axles.

Each

No. 2—Malleable; Height 21½ in., Lift 8¼ in.; Lifting Bar 1⅛x1⅛x20½ in.; Will Lift 10,000 Lbs.....$6.00

Open Stock Weight 21 Lbs.

COVERT

Made of Steel, Japanned; Ratchet Adjustment.

No. 475—Carriage; Leather Covered Step; Height 24¼ in., Raise 2 in., Lift 1000 Lbs.; Length of Ratchet 10 in., 1 in. Bar; Weight 6 Lbs....$1.50

No. 476—Wagon; Height 24½ in., Raise 2¼ in.; Lift 2500 Lbs.; Length of Ratchet 9½ in., 1½ in. Bar; Weight 10½ Lbs. Each..... 2.00

Open Stock

LANE WAGON

Made of Steel throughout, Japanned; the Compound Levers near the bottom and the downward pressure of the Fulcrum, give a great lifting capacity; Compact and easily adjusted to different heights of axles.

Each

No. 1L—Height Over-all 26¾ in., Size of Steel 1⅛x⅞ in., Adjusts from 15 to 24 in.; will Lift 900 Lbs.; Weight 9½ Lbs. Each.....$1.80

No. 2L—Height Over-all 29 in., Size of Steel 1⅛x⅞ in., Adjusts from 17 to 26 in.; will Lift 1800 Lbs.; Weight 16½ Lbs. Each..... 2.80

No. 3L—Height Over-all 37½ in., Size of Steel 1⅜x⅞ in., Adjusts from 15½ to 26 in.; will Lift 4000 Lbs.; Weight 30 Lbs. Each..... 6.00

FELLOE OILERS

For filling the Felloes of wagon wheels with Linseed Oil; will swell the wheels and save the cost of setting tires; One gallon of Oil will treat four wheels; Trough may also be used for grindstones or for washing vehicle wheels, etc.

CAST IRON

Each

No. 1—24 in. Long, 5 in. Wide, 3¾ in. Deep; Will Take up to 4 in. Tires; Weight 14 Lbs. Each.....$1.25

No. 2—24 in. Long, 3½ in. Wide, 3½ in. Deep; Will Take up to 2 in. Tires; Weight 10 Lbs. Each..... 1.00

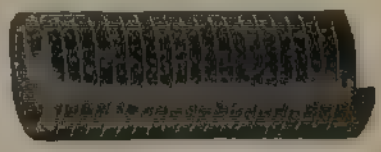
CORRUGATED GALVANIZED IRON, SEAMLESS

No. 10—26 in. Long, 4 in. Wide, 4¼ in. Deep; Will Take up to 4 in. Tires; Weight 1¼ Lbs. Each.....$0.75

No. 20—26 in. Long, 3½ in. Wide, 4¼ in. Deep; Will Take up to 2 in. Tires; Weight 1 Lb. Each..... .60

AXLE WASHERS

Used by Liverymen, Draymen, Farmers, Teamsters, Etc.



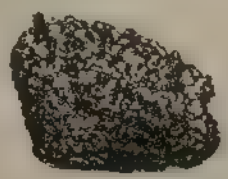
No. 70—COIL

Made of Best Oak Tanned Belting Leather; Adjustable to fit any Nut or Collar

Diam. Hole, In.....	⅞	1	1⅛	1¼
Weight Box, Lbs....	⅜	⅜	½	⅝
Per Hundred $0.24	.26	.28	.36	

Twenty Washers in a Coil, Five Coils in Box

SPONGES



For Washing Horses, Vehicles, Automobiles, Etc.

Per Pound

No. 73—Florida Yellow Forms, 8 to 10 per Lb.....$3.50

No. 74—Genuine Sheep Wool, Washed Forms, 6 to 8 per Lb..10.00

No. 75—Genuine Sheep Wool, Washed Forms, 25 to 28 per Lb. 7.20

Open Stock

CHAMOIS SKINS

No. 76—Small, 13x17 in., for Toilet Purposes, Cleaning Silverware, etc.....$0.62
Weight ¾ Lb. per Dozen

Each

No. 77—Medium, 15x13 in., for Household use, cleaning Furniture, Pianos, etc.....$0.84
Weight 1 Lb. per Dozen

Each

No. 78—Large; 18x24 in.; for Carriage Purposes $1.16
Weight 1½ Lbs. per Dozen
Open Stock

AUTOMOBILE CHAMOIS

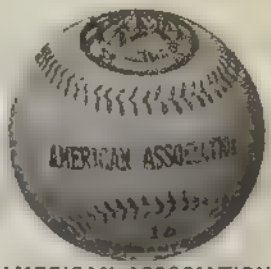
Each

No. 79—French Oil Dressed; Finished on one side only, Size 26x33 in. $1.50

No. 80—Size 27x34 in., otherwise same as No. 79.. ..... 2.00

ZENITH BASE BALLS

NATIONAL LEAGUE
Guaranteed for 18 Innings
Per Dozen
No. 12—Pure Para Rubber Center, wound with high grade Woolen Yarn; Selected Horsehide Cover; Stitched with Red and Black Waxed Linen Thread; Warranted to weigh 5 oz. and to measure 9 in Circumference... **$15.00**



AMERICAN ASSOCIATION
Per Dozen
No. 18—Pure Para Rubber Center, wound with good grade Woolen Yarn; Selected Horsehide Cover; Stitched with Orange and Green Waxed Linen Thread; Warranted to weigh 5 oz. and to measure 9 in. Circumference.. **$12.00**

MAJOR LEAGUE
Per Dozen
No. 22—Combination Center of Rubber and Felt Clippings, wound with Woolen Yarn; Selected Horsehide Cover; Stitched with Red and Blue Waxed Linen Thread; Regulation 5 oz. weight, 9 in. Circumference.....**$9 00**

WESTERN LEAGUE
Per Dozen
No. 24—Compressed Felt and Rubber Center, wound with good quality Yarn; Best grade Horsehide Cover; Stitched with Red and Green Waxed Linen Thread, Regulation 5 oz. weight, 9 in. Circumference **$6.00**

All Wrapped in Tissue and Silver Foil, Individually Boxed and Sealed

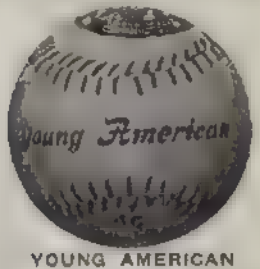
OFFICIAL BOY'S LEAGUE
Per Dozen
No. 40—Junior Size; Compressed Felt and Rubber Center; Tightly wound with Yarn; Selected Horsehide Cover; Stitched with Red and Purple Waxed Linen Thread; Weight 4½ oz. Circumference 8½ in **$6 00**

SEMI-PROFESSIONAL LEAGUE Per Dozen
No. 28—Compressed Woolen Felt and Rubber Center; Tightly wound with Yarn; Genuine Horsehide Cover; Stitched with Red Waxed Linen Thread; Weight 5 oz.; Circumference 9 in... **$3 00**

CHAMPION
Per Dozen
No. 42—Compressed Woolen Felt and Rubber Center; Tightly wound with Yarn; Genuine Horsehide Cover; Stitched with Red Waxed Linen Thread; Weight 4½ oz.; Circumference 8¾ in **$3 00**

NATIONAL STAR
Per Dozen
No. 32—Center made of good lively Material; Tightly wound with Yarn; Selected Sheepskin Cover; Stitched with Red Waxed Linen Thread; Weight 8 oz.; Circumference 9 in..... **$3 00**

All Wrapped in Tissue, Individually Boxed and Sealed



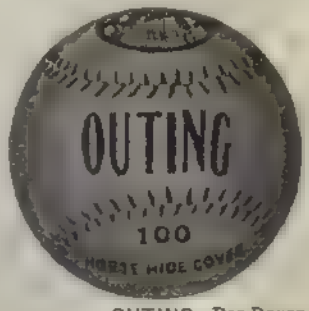
YOUNG AMERICAN
Per Dozen
No. 46—Boy's Size; Lively Center; Selected Sheepskin Cover; Stitched with Red and Blue Twisted Waxed Linen Thread. Weight 4½ oz.; Circumference 8¾ in. **$3 00**

BOY'S FAVORITE
Per Dozen
No. 48—Boy's Size; Lively Center; Genuine Sheepskin Cover; Stitched with Red Waxed Linen Thread; Weight 4½ oz.; Circumference 8¾ in.....**$1 20**

EXPERT
Per Dozen
No. 50—Boy's Size; Lively Center; Heavy Imitation Leather Cover; Stitched with Green Waxed Linen Thread; Weight 4½ oz.; Circumference 8¾ in..**$1 80**

FAMOUS
Per Dozen
No. 52—Boy's Size; Clean Shoddy Center; Imitation Leather Cover; Stitched with Red Waxed Linen Thread; Weight 4 oz. Circumference 8¾ in.....**$0 60**

DANDY Per Dozen
No. 54—Small Boy's Size; Shoddy Center; Imitation Leather Cover, Stitched with Red Waxed Linen Thread; Weight 4 oz.; Circumference 8 in.....**$0 60**



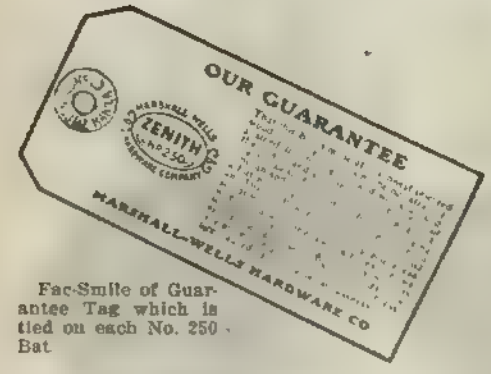
OUTING Per Dozen
No. 100—Soft, Large Size; for Ladies and Children and for Indoor Play; Genuine Horsehide Cover; Stitched with Red Waxed Linen Thread; Circumference 10 in.....**$3 00**

PARLOR LEAGUE
Per Dozen
No. 85—Soft; Genuine Sheepskin Cover; Stitched with Red Waxed Linen Thread; Weight 4½ oz.; Circumference 8¾ in..**$1.20**

LITTLE INDOOR
Per Dozen
No. 80—Soft; Imitation Leather Cover; Stitched with Red Waxed Linen Thread; Weight 4 oz.; Circumference 8 in.....**$0 60**

ZENITH BASE BALL BATS

Four Models; Guaranteed



Fac-Smile of Guarantee Tag which is tied on each No. 250 Bat

PROFESSIONAL LEAGUE

The Zenith Professional League Bat is guaranteed to be perfect in material and workmanship, and we will replace any Bat that shows any defect; We will not replace Bats that are broken by being improperly held and struck against the grain; the Trade Mark of the Bat must be held straight up or straight down while the Ball is struck, so that the blow comes on the side, not where the Bat is branded, nor on the side directly opposite the Zenith Trade Mark; a Bat cannot stand the strain of the impact if held the wrong way of the grain; There is positively no guarantee on a Bat broken with the grain.

Made from Finest Quality White Ash; the timber is hand split, not sawed, thereby preserving a continuous grain which is absolutely straight and free from knots; Seasoned for three years and dried under cover (no kiln); This treatment produces the hardest and toughest wood possible to obtain; the Finishes are Hand and Electrical work and in no way cover the grain of the wood; the assortment is such as to meet the requirements of all Players and enable the dealer to sell a guaranteed line of Bats that stay sold, and each one produces a satisfied customer.

The four Models are the exact duplicate, as far as measurements, dimensions, weight, etc., are concerned, of the Bats used by Ty Cobb, Eddie Collins, Hans Wagner and Frank Baker.

☞ State Model Wanted, either Eddie Collins, Model 3; Frank Baker, Model 6; Hans Wagner, Model 7; or Ty Cobb, Model 9

	Per Dozen
No. 250—White Ash, Guaranteed, Natural Finish; Assorted Lengths, from 32 to 36 in.	$18.00

Average Weight 37 Lbs. per Dozen

ZENITH BAT RACKS

Shows the Fine Appearance of the Zenith Bat Rack filled with High Grade Bats

One of these Zenith Bat Racks in a Store settles the vexing question of properly displaying Base Ball Bats; It is just as appropriate for the largest Department Store as for the small Sporting Goods Dealer.

	Each
No. 500—Strongly made of Selected Oak, Weathered Oak Finish; Height 39 in.; Size of Top 16x28 in.; Mounted on Wheel Casters; Put together with Bolts and Nuts; Perfectly Rigid when Set-Up; Without Bats	$5.00

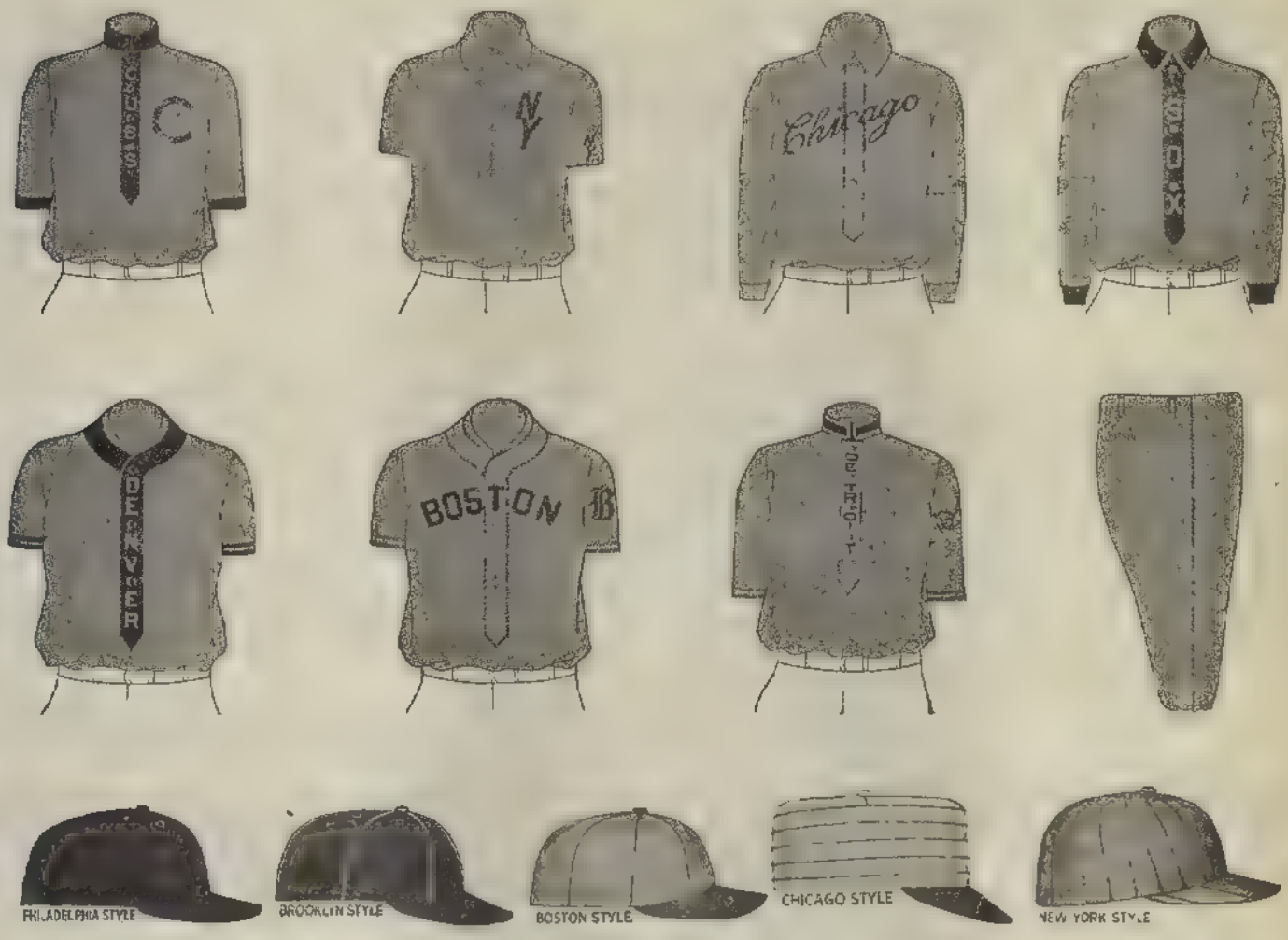
Shipped Knocked Down; Weight 16 Lbs. Each

Notice: This Bat Rack will be given free of charge, with the following assortment of Zenith Bats; It will make many sales; Allow the boys to try 'em all; Will double your Bat sales

	Retail, Each	Total
1 Doz., No. 250 —Zenith Bats	$1.25	$15.00
1 Doz., No. 200 —Zenith Bats	1.00	12.00
1 Doz., No. 150 —Zenith Bats	.75	9.00
1 Doz., No. 100B—Zenith Bats	.60	6.00
1 Doz., No. 50 —Zenith Bats	.25	3.00
Total Retail Value of Bats		$45.00

Secure One of these Zenith Bat Racks, fill it with above assortment of High Grade Bats, place in a conspicuous part of the Store and see how quickly sales are made

ZENITH BASE BALL UNIFORMS



ZENITH BASE BALL UNIFORMS

CARRIED IN STOCK; Shipped Same Day Received

Made from material that is Tough and Durable, will wear well and give the users excellent service, the fact that we carry them in stock allows the dealer to promise immediate delivery. This is a decided advantage when equipping a Base Ball Club, usually in a hurry for the goods, and often during the busy season factories are Behind with orders with consequent delays. **All orders for these Uniforms will be shipped the day received.**

Chest and Waist Measures are all that is required; Chest Sizes 36, 38, 40, 42 in.; Waist Sizes 32, 34, 36, 38 in.

Per Suit

No. S1312—Made from the Best All-Wool 14 Oz. Specially Woven Athletic Flannel, which is sponged and shrunk before being cut; Very Strong and Durable; We Guarantee these Uniforms to give absolute satisfaction, Steel Gray Color with fine Navy Stripe; Shirt, Button Front, Elbow Sleeves, Navy Band on Sleeves, Corded in Navy; Pants, Elastic Bottom, Lined and Corded in Navy; Caps, Philadelphia Style with Navy Visor and Seams Corded in Navy; Hose, Navy with White Stripe; Navy Belt $10.00

Per Suit

No. S1313 Steel Gray Color, with Wide Blue Stripe; **Shirt,** Button Front, Elbow Sleeves, with Crimson Band around Sleeves, the Collar and Pleat are beaded in Crimson; **Pants,** Plain, no Padding, with Corded Seams down the sides; **Caps,** Boston Style, with Crimson Corded Seams and Visor; Crimson Corded **Hose** and **Belt** $7.00

Per Suit

No. S1314 Yale Gray, Navy Stripe; **Shirt,** Button Front, Elbow Sleeves with Navy Band around Sleeves, Navy Collar; **Pants,** Plain, Elastic Bottom; **Caps,** Boston Style, with Navy Visor and Navy Button; Navy Corded **Hose** and **Belt**.....$5.00

One Suit Complete in a Box; Weight 3 Lbs. Each

BASE BALL UNIFORMS

Sold F.O.B. Factory Chicago Ill.

We Require at Least Ten Days' Time on all Orders

Sample Books of Colors and Materials, with Measurement Blank, mailed on request

MAJOR LEAGUE

Made from the Highest Grade Athletic Flannel, carefully made and finished throughout, trimmed with a Silk Cording or made up Plain at no extra charge

Shirt—Any Style	Each	$7 50
Pants—Any Style	Pair	5.60
Hose—Best Quality Wool	Pair	1.30
Cap—Any Style	Each	1.20
Be t—Web Belt or Solid Leather	Each	1.00
	Per Suit	
No. 0—Major League Uniform; Shirt, Pants and Cap may be had Plain or with Silk Cording		$16.60

SPECIAL LEAGUE

A very popular Uniform on account of the special quality of Athletic Flannel in which this grade is made. Carefully made and finished in the same manner as our Major League Uniforms

Shirt—Any Style	Each	$6 40
Pants—Any Style	Pair	4.50
Hose—Pure Wool	Pair	1.20
Cap—Any Style	Each	1.10
Belt—Web Belt or Solid Leather	Each	.80
	Per Suit	
No. 2—Special League Uniform; Shirt, Pants and Cap may be had Plain or with Silk Cording		$14.00

CLUB SPECIAL

Club Special Uniform is made from a Heavy Weight Special Quality of Athletic Flannel, cut and made to individual measurements in the same manner as high class clothing.

Shirt—Any Style	Each	$4.60
Pants—Any Style	Pair	3.50
Hose—Heavy Ribbed Cotton, any Standard Color and Combination	Pair	.90
Cap—Any Style	Each	1.00
Belt—Web or Solid Leather	Each	.70
	Per Suit	
No. 4—Club Special Uniform; Shirt, Pants and Cap may be had Plain or with Silk Cording		$10.70

CHAMPION

Made of good quality Athletic Flannel; a servicable and neat appearing Uniform

Shirt—Any Style	Each	$3.00
Pants—Any Style	Pair	2.50
Hose—Heavy Cotton Ribbed, any Standard Color and Combination	Pair	.70
Cap Philadelphia Style	Each	.60
Belt—One Strap Cotton Web	Each	.40
	Per Suit	
No. 6—Champion Uniform		$7 20

MINOR LEAGUE

Made from a Fine Grade Athletic Flannel, carefully finished throughout as our No. 0 Uniform. Trimmed with a Silk Cording or made up Plain.

Shirt—Any Style	Each	$7.00
Pants—Any Style	Pair	5.00
Hose—Best Quality Wool	Pair	1.30
Cap—Any Style	Each	1 20
Belt Web Belt or Solid Leather	Each	.80
	Per Suit	
No. 1—Minor League Uniform		$15 30

AMATEUR SPECIAL

A Serviceable Uniform for the Club or High School Team. Carefully finished throughout

Shirt—Any Style	Each	$4.80
Pants—Any Style	Pair	3.80
Hose—Good Quality Wool	Pair	1.00
Cap—Any Style	Each	1.00
Belt -Web Belt or Leather Lined	Each	.70
	Per Suit	
No. 3—Amateur Special Uniform		$11.30

SPECIAL LEADER

A Special Quality of Flannel is used in this grade, which appeals to those who desire a neat appearing attractive Uniform at a moderate price.

Shirt—Any Style	Each	$3.60
Pants—Any Style	Pair	3.00
Hose—Heavy Ribbed Cotton, in any Standard Color and Combination	Pair	.90
Cap—Any Style	Each	.90
Belt—Two Strap Cotton Web	Each	.50
	Per Suit	
No. 5—Spec al Leader Uniform Shirt, Pants and Cap may be had Plain or trimmed with a Mercerized Braid		$8.90

YOUTH'S FAVORITE

A popular Uniform for Youths or Young Men; Made up in a neat attractive manner

Shirt—Any Style	Each	$2.14
Pants—Any Style	Pair	1.88
Hose—Ribbed Cotton, Any Standard Color	Pair	.40
Cap—Philadelphia Style	Each	.46
Belt—One Strap Cotton Web	Each	.22
	Per Suit	
No. 7—Youth's Favorite Uniform		$5.10

One Suit in a Box; Average Weight 3½ Lbs. per Suit

BASE BALL SHOES

Sizes 6, 6½, 7, 7½, 8, 8½, 9, 9½, 10

In Ordering, be Sure to Specify Size

Per Pair

No. 501—American League Style and Quality, Hand Made Throughout; Genuine Kangaroo Uppers, the Lightest and Strongest Leather Made; Flexible Shank; Flexible Oak Soles; Goodyear Welt; Fitted with Drop Forged Steel, Heel and Toe Plates, Sharpened $5.00

One Pair in a Box; Weight 2 Lbs. per Pair

Per Pair

No. 401—Pennant, Fine Quality; Machine Sewed; Uppers made from Essex Kangaroo, Good Flexible Leather Soles; Hand Forged Steel, Heel and Toe Plates, Sharpened..$4.50

One Pair in a Box; Weight 2 Lbs. per Pair

Per Pair

No. 301—Sprinter; Black Leather Uppers, Flexible Sprinting Sole; fitted with Sharpened Heel and Toe Plates $4.25

One Pair in a Box; Weight 2 Lbs. per Pair

WHY ZENITH HATCHETS ARE BEST

No. 1 No. 2 No. 3 No. 4 No. 5 No. 6

Nos. 1, 2 and 3 are made by three well known Manufacturers

Zenith

These six illustrations are of Hatchets which have been cross sectioned, to show construction of Tool and quality of Steel.

The first four are welded together from different kinds of Steel; the last two are of one solid piece of Steel. It is the general misunderstanding of the trade that some Hatchets stand at the top as to quality, because they are by far the highest priced. Ask these manufacturers why their Hatchets are made with a weld and the answer is that the experience of many, many years has taught them that the best Hatchet is made by the same method as was used by their grandfathers.

The true reasons for their manufacturing welded Hatchets are as follows: When they started manufacturing of Hatchets, over half a century ago, their equipment was probably not much better than that now found in any good Blacksmith shop. At that time, the Steel industry was in a very crude state and Puddled Iron was the commercial product. No Bessemer or Open-hearth Steel processes existed. There was a small amount of Crucible Steel made, but this was very expensive and was made almost exclusively in England.

Puddled Iron is an exceedingly soft and ductile material having an irregular composition, containing variable amounts of foreign impurities called slag or cinder. This Iron is not freed from its slag by melting, as is metal remolten in the Crucible or in the Open-hearth Furnace. Such Puddled Iron, of course, could not be used for the edges of Tools, and consequently the practice was to weld a strip of Crucible Steel on the Blade of Puddled Iron to form the Edge and another piece on the Head as seen in Nos. 1 and 2.

In the further development of the Steel industry, Puddled Iron was replaced by Bessemer and Open-hearth Steel. By these processes, Steels of definite chemical composition in large quantities (many thousand pounds) can be made according to the desired purpose, either low in carbon and consequently ductile and weldable as Puddled Iron, or high in carbon and therefore tough and hard and equal in many respects to Steel cast in a crucible.

It required much skill and caused much resulting loss in defectives to make a perfect weld between Crucible Steel of high carbon and Puddled Iron. But it is still more difficult to produce such a weld between high carbon Tool Steel and low carbon Open-hearth or Bessemer Steel. The welds frequently break or split open and render the Hatchets useless, or the high carbon Crucible Steel edge is often spoiled by heating it too highly in the welding process, thus rendering it brittle.

One concern has not even progressed to the point of putting in a press to punch out the eye, but still makes it by folding the flat Steel over an eye mold and welding together, the ends, as is seen in No. 1 where a weld is visible starting at the beveled edge and going over to the corner of the eye. This folded weld does not injure the Hatchet in the slightest, if it has been made a perfect weld by great skill and care, but it certainly does increase the cost, without bettering the Hatchet.

From our experience in the past years with "returned" Hatchets having a welded edge, we have noted that about 75% of the defects were caused by imperfect welds at the beveled edge, and for this reason, later manufacturers use a weld similar to that in sample No. 3.

This particular sample has a low grade of Steel in the body of the Tool, indicated by the dark streaks which run through the metal. The Tool Steel edge which is welded on by overlapping contains 25% less carbon than the Edge Steel in either No. 1 or No. 2.

This No. 3 construction is an improvement as far as breaking of the edge weld is concerned, but even here we will have the same trouble if the Hatchet is ground far down.

As with No. 1 and No. 2 there is also the difficulty of getting a perfect weld without injuring the quality and temper of the edge Steel.

In consequence with the development of the Steel Industry, an All-Steel Hatchet appeared at first in the cheaper grades and was found to give very good satisfaction in cases where good Steel was used and the proper temper given. The most progressive and modern factories then began making one-piece hatchets with First Quality Tool Steel of High Carbon.

We are satisfied that a one piece Hatchet manufactured from high Grade Steel (of uniform chemical composition, free from streaks and lamination, slag or other impurities) and correctly tempered, is the best Hatchet that can be made (and have adopted it) for our Zenith Brand, No. 6.

There may be a wide difference in one piece, Steel Hatchets. You will note in No. 5 a low grade of Steel is used. The photo shows dark parallel streaks, which are the result of a variation in composition and lamination of the Steel, which is apt to be brittle. The tempering is not done uniformly and judiciously.

Sample No. 6 is our present Zenith and you will note that the Steel is absolutely uniform and flawless. We know that this brand cannot vary in quality; that every lot of Steel is thoroughly tested before going into the forge and that the facilities in the hardening room are such as to control and maintain a uniform heat treatment in the tempering process. We are certain that these Hatchets are the best that can be made and fewer failures will be found among them than in any others.

Besides the quality of the Steel and Temper, the shape of the Zenith Tool will appeal to the user. It is more slimly built and requires less effort in cutting and splitting wood than a thicker Hatchet blade. It requires less work to regrind the edge properly, since the grinding bevel is much thinner.

The Hatchet is tempered very hard, as far as the light discoloration seen on the print. If the Hatchet is desired to be used still further, it can be rehardened and tempered—another feature of advantage over the old style Hatchets.

Lastly, the Zenith Wedge is the best "Handle Fastening" yet evolved.

SINGLE BITTED AXES

ZENITH

Full Polished Fire Blue Finish
Zenith Trade Mark Etched In

This Axe is shaped to stand the hardest usage; the Blade is ground thin; the Axe is properly balanced; the Eye is perfect so that the Axe will hang right; the Edge is made of Highest Grade of Crucible Steel properly hardened, tempered, ground and sharpened.

Axes Guaranteed Free from Flaws and Soft Temper; Factory to be Judge of alleged defects.

No. 500—MICHIGAN PATTERN

Unhandled

Weights	3¼ to 3¾	3½ to 4	3½ to 4½	4 to 5
Per Dozen	$16.00	16.50	16.50	17.00

No. 501—CALIFORNIA PATTERN

Unhandled

Weights	3¼ to 3¾	3½ to 4	3½ to 4½	4 to 5
Per Dozen	$16.00	16.50	16.50	17.00

One Dozen Assorted Weights in a Case; Shipping Weight 50 Lbs. per Dozen

ZENITH, SINGLE BITTED

Factory Handled with Clear Oval Hickory Handles

Specially for Store Trade; Correctly Handled and Neatly Finished

No. 502—MICHIGAN PATTERN

Weights	3¼ to 3¾	3½ to 4	3½ to 4½	4 to 5
Per Dozen	$21.00	21.50	21.50	22.00

No. 503—CALIFORNIA PATTERN

Weights	3¼ to 3¾	3½ to 4	3½ to 4½	4 to 5
Per Dozen	$21.00	21.50	21.50	22.00

One Dozen Assorted Weights in a Case; Shipping Weight 70 Lbs. per Dozen

We Handle Axes in our own shop, using the Zenith Wedge Lock, and any of the following Grades of Handles from our own stock. The work is correctly and neatly done, and is superior to Factory Handling.

No. 500 or No. 501 Axes Shop Handled as follows:

Michigan Pattern	California Pattern		
No. 504	No. 5040—With Zenith Oval Hand Shaved Hickory Handles	Add per Dozen	$9.00
No. 505	No. 5050—With Zenith Octagon Hand Shaved Hickory Handles	Add per Dozen	9.00
No. 506	No. 5060—With Hartford Oval Hand Shaved Hickory Handles	Add per Dozen	8.00
No. 507	No. 5070—With Hartford Octagon Hand Shaved Hickory Handles	Add per Dozen	8.00
No. 508	No. 5080—With Northern King Octagon Hickory Handles	Add per Dozen	7.50
No. 509	No. 5090—With Oregon Oak Octagon Hand Shaved Handles	Add per Dozen	8.00

MEAT CLEAVERS

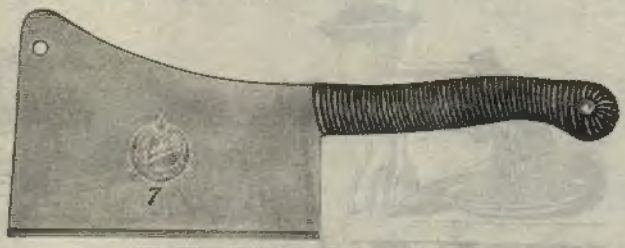
Made of the Finest Tool Steel, by the Best Workmen, Warranted Against any Flaws

ZENITH, HICKORY HANDLE

Butchers', Heavy Steel; Varnished Hickory Handle

Nos.	0	1	2	3	4	5	6
Width Cut, In.	7	8	9	10	11	12	13
Wt. Doz., Lbs.	29	36	42	50	59	69	76
Per Dozen	$14.00	16.50	19.00	21.50	24.00	27.00	30.00

Half Dozen in a Box

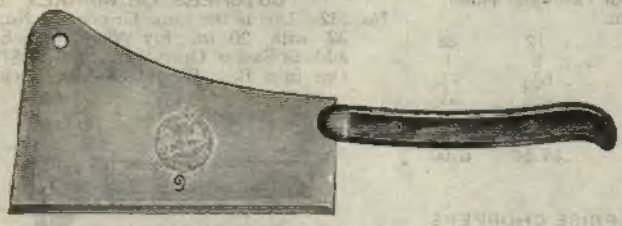


ZENITH, TWINE BOUND HANDLE

Butchers', Extra Quality, Twine Bound, Iron Handle

Nos.	87	88	89	90
Width Cut, In.	7	8	9	10
Weight Dozen, Lbs.	39	45	54	59
Per Dozen	$17.50	20.00	22.50	25.00

Half Dozen in a Box

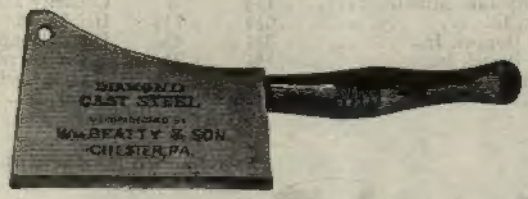


ZENITH, FLAT HANDLE

Butchers', Extra Quality Cast Steel, Riveted, Stained Hardwood Handles

Nos.	038	039
Width Cut, In.	8	9
Weight Dozen, Lbs.	36	42
Per Dozen	$17.00	20.00

Half Dozen in a Box



DIAMOND KITCHEN CLEAVERS

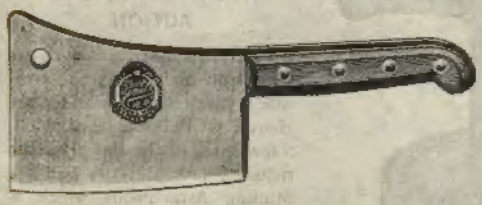
Household, Solid Steel, Polished and Tempered; Hardwood Handles, Stained; ¾ in. Strong, Steel Ferrule.

Per Dozen

No. 85—6¼ in. Cut; Weight 10½ Lbs., per Dozen $7.50

One Dozen in a Box

MEAT CLEAVERS



ZENITH FAMILY CLEAVERS

Per Dozen

No. Z23—Household, Solid Tool Steel Blade, Polished and Tempered; Stained Hardwood Handle; Four Large Brass Rivets; Width of Cut 6 in. $8.50

Half Dozen in a Box

Weight 12 Lbs. per Dozen

SENSIBLE

Japanned Cast Iron Handle, Nickel Plated Removable Steel Blades; a fast and and clean Cutter

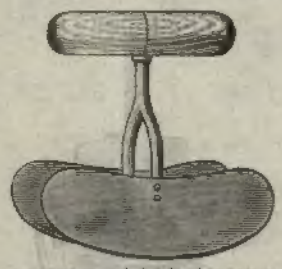
Per Dozen

No. 10—One 5 in. Blade $2.25
No. 40—Four Blades, 2 in. from Center to Edge 3.00
No. 60—Six Blades, 2 in. from Center to Edge 4.50

One Dozen in a Box

Weight 4½, 5½ and 7 Lbs. per Dozen

CHOPPING OR MINCING KNIVES



DOUBLE BLADE, YOKED

Per Dozen

No. 15—Two 5½ in. Polished Steel Blades, Riveted to Malleable Shank; Oiled Wood Handle $2.40

One Dozen in a Box

Weight 3¾ Lbs. per Dozen

DOUBLE BLADE, BOWED

Per Dozen

No. 200—Two 6 in. Polished Steel Blades, Tinned Cast Iron, Bowed Shanks, Rosewood Handle $4.00

Half Dozen in a Box

Weight 5 Lbs. per Dozen

SINGLE BLADE, YOKED

Per Dozen

No. 35—6¼ in., Steel Blade, Malleable Shanks, Plain Wood Handle $1.80

One Dozen in a Box

Weight 3¼ Lbs. per Dozen

SINGLE BLADE

Per Dozen

No. 13—6 in. Polished Steel Blade, Japanned Hollow Cast Iron Handle; a Stiff, Strong Cutter $3.00

One Dozen in a Box

Weight 7 Lbs. per Dozen

CLIMAX

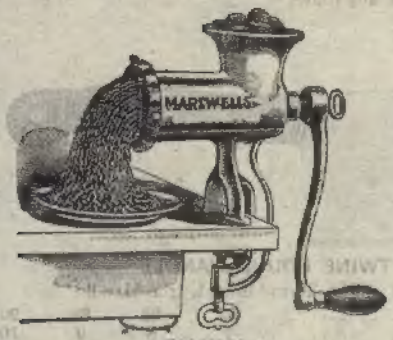
Per Dozen

No. 25—5½ in., Polished Steel Blade, Heavy Shoulders and Tangs, well Fastened in Beechwood Handle $6.00

Half Dozen in a Box

Weight 4½ Lbs. per Dozen

MARSWELLS MEAT CHOPPERS



FAMILY

2 in. Clamp Opening, Size of Outlet Holes 1/4 in.; a Strong and Efficient Chopper

Nos.	5	10
Capacity Lbs. Minute	1½	3
Height, In.	6⅛	7½
Diam. Hopper, In.	3¾	4⅝
Diam. Barrel, In.	1¾	2⅜
Weight Each, Lbs.	4¾	8¾
Each	$3.50	5.00

Half Dozen in a Case

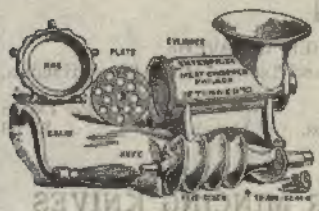
BUTCHERS' OR MARKET

Screws to Table, takes 4 No. 14 Screws; 1/4 in. Outlet Holes; Adapted for Farm and Hotel Use, etc.

Nos.	12	22
Capacity Lbs., Minute	3	4
Height, In.	6½	7¼
Diam. Hopper, In	4⅝	5½
Diam. Barrel, In.	2⅜	3
Weight Each, Lbs.	9	14
Each	$4.50	8.00

BUTCHERS' OR MARKET Enc

No. 232—This is the same Grinder as No. 33 with 20 in. Fly Wheel, which adds to Ease of Operation $16.00
One in a Box; Weight 38 Lbs. Each



PARTS FOR MARSWELLS OR ENTERPRISE CHOPPERS

Machine Nos.	5	10	12	22	32	232
Knives	$0.40	.50	.50	.70	1.00	1.00
Plates, Holes 1/4 in. or Larger	.50	.90	.90	1.20	1.60	1.60
Plates, 1/8 in. Holes	1.00	1.20	1.20	1.50	2.60	2.60
Plates, 5/64 in. Holes	1.40	1.80	1.80	2.40	4.60	4.60
Crank Thumb Screws	.30	.40	.40	.40	.50	.50
Cranks	.50	.60	.60	1.00	1.20	1.20
Rings	.50	.60	.60	1.20	1.60	1.60

Note—When Attaching to Iron or Stone Counter, put piece of Leather under each leg

SAUSAGE STUFFER ATTACHMENTS

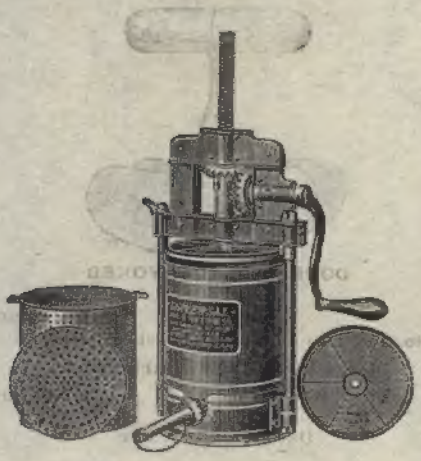
For Marswells or Enterprise Meat Cutters

Nickel Plated Spun Brass; ¾ in. Corrugated Spout prevents Air from entering Sausages.

Nos.	10A	12A	22A
Cutter Nos.	10	12	22
Weight Dozen, Lbs.	1½	1¾	2
Per Dozen	$12.00	12.00	15.00

Open Stock

FRUIT AND LARD PRESSES



UNIVERSAL

Made of Steel; Ball Bearings; Screw Movement. Top can be swung out for easy filling; Lipped Tin, Inside Cylinder prevents burning hands when removing contents.

Nos.	44	66	88
Qts.	4	6	8
Hgt, In.	18	18	21
Wght.	41	60	75
Each	$11.00	12.50	14.00

One in a Crate

INDEPENDENT, QUICK ACTION

All Parts requiring Strength are Cast Iron and Steel; the Outside Cylinder and Colander are Heavy Tin Plate, Enameled; a few turns of the Bar gives the required pressure; the Sausage Stuffing Attachment which is furnished at additional Cost adapts it for Stuffing Sausages.

Nos.	2	4	6
Quarts	2	4	6
Weight, Lbs.	9	15	17
Each	$3.00	3.60	5.00
Sausage Stuffing Attachments Each	$1.10	1.30	

SAUSAGE STUFFERS

PERRY

Japanned Cast Iron, Heavy Tin Spout, 7½ in. High, 23 to 25 in. Lever Handle, Screws to Bench; Two Sizes, Family and Butcher

Nos.	1	0
Height Body, In.	7	7½
Diam. Body, In.	3½	4¼
Weight Dozen, Lbs.	140	190
Per Dozen	$30.00	42.00

Half Dozen in a Case

HAVEN RAILROAD

Per Dozen

No. 1H—Length, Closed, 14¼ in.; Japanned Cast Iron Frame; Heavy Tin Cylinder, Diam. 3⅝ in.; Tin Spout, Capacity 3½ Lbs. of Meat, Screws to Bench or Table; for Hotel or Family Use $15.00

One Dozen in a Case; Weight 120 Lbs. per Dozen